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VOLUME 55
1 9 5 6

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THE JOURNAL
of the Michigan State Medical Society

VOLUME 55 JANUARY, 1956 NUMBER 1

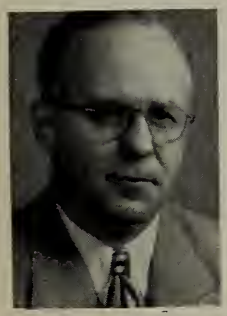
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Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 14, Minnesota.

Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, $6.00; single copies, 60 cents. Additional postage; Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year.

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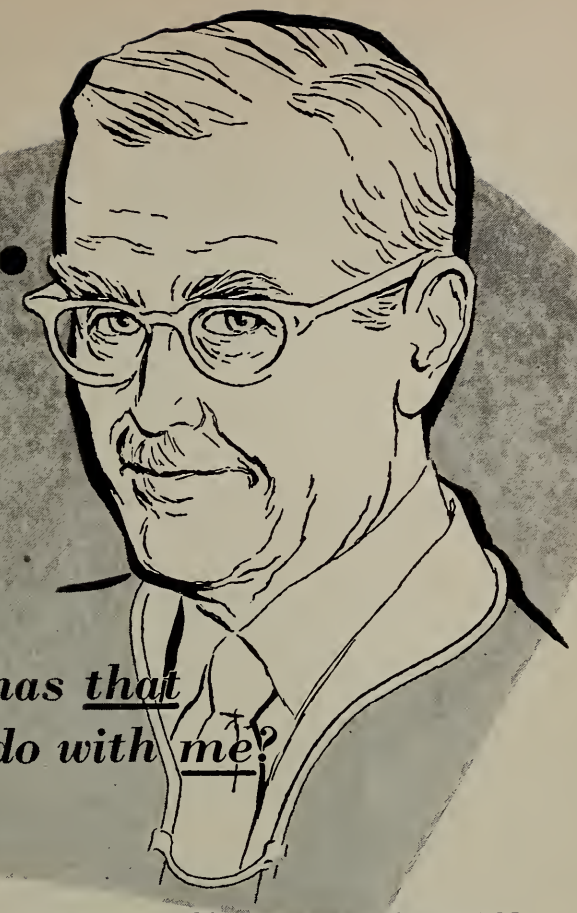
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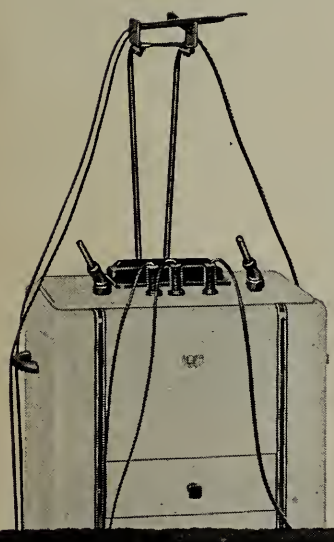


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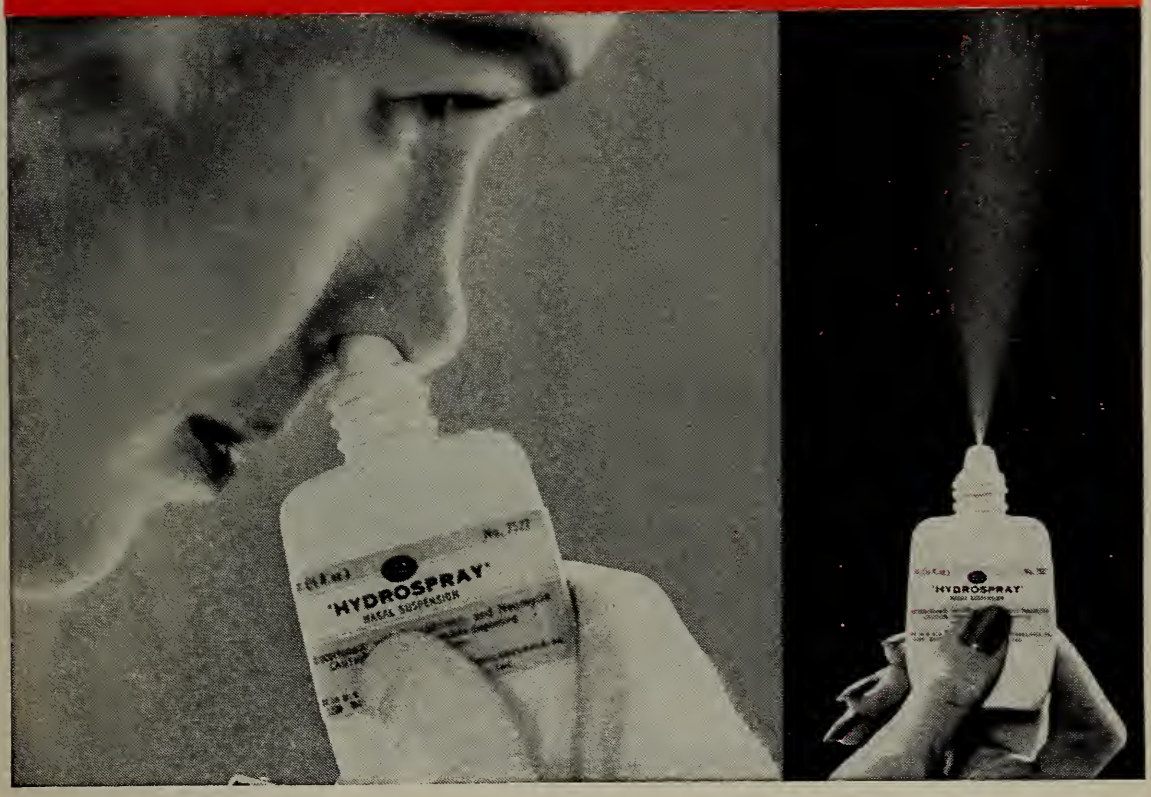
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Representing S.E. Michigan Division, American Cancer Society

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IOWA BANS EMPLOYMENT OF DOCTORS

A District Judge of Iowa recently upheld a ruling of that State's Attorney General to the effect that hospitals which employ doctors and profit from their services are guilty of the corporate practice of medicine. This action is specifically forbidden by Iowa law. This decision is one of major and national significance.

Private Practice Victory

Pathologists and radiologists, who were chiefly concerned with the verdict, hailed the decision as a victory for private medical practice. The Iowa Hospital Association, which brought the suit against the State Attorney General, the State Board of Medical Examiners, and the Association of Pathologists, is likely to appeal the decision to the State Supreme Court. The District Court's decision has established a precedent that may affect salaried doctors across the nation who wish to be released from hospital ties.

By his decision, Judge Edwin C. Moore supported the contention of pathologists and radiologists that their hospital work is medical service for which they must directly bill their patients.

Guilty of Fee-Splitting

The Judge added that any hospital specialist who allows the institution to bill a patient for his services is guilty of fee-splitting. He conceded, however, that a hospital has the right to bill patients for laboratory services in the doctor's name, thus serving in effect, as his collection agent.

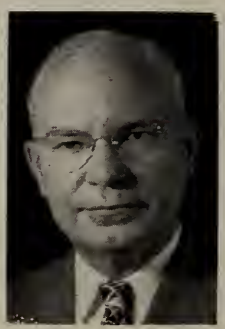
DOCTOR LOCATIONS

Through November 30, 1955

Name	*Opens Practice in*	*Approximate Date*
Placed by Michigan Health Council		
C. K. Dettman, M.D.	Montrose	November 1
Assisted by Michigan Health Council		
John H. Glynn, M.D.	Battle Creek	November 1
Robert Puite, M.D.	Grand Rapids	September
Gerald Beal, M.D.	St. Joseph	November
Archie Hulick, M.D.	Detroit	November
George W. Renton, M.D.	Dearborn	

MCI QUIZZES

Three Discussion Conferences will be held at the 1956 Michigan Clinical Institute. These quiz periods are arranged from 12:00 noon to 1:00 p.m on Wednesday, Thursday, Friday, March 7, 8, 9. All the guest speakers of each day will be invited to appear on the platform.



R. L. Mustard, M.D.



W. B. Cooksey, M.D.



L. E. Bauer, M.D.

An opportunity to ask questions concerning the presentations of the guest essayists, or to discuss one of your interesting cases with them, will be provided.

Leader of the Wednesday discussion is R. L. Mustard, M.D., of Battle Creek; the Thursday conference will be under the leadership of W. B. Cooksey, M.D., Detroit; the Friday quiz will be monitored by L. E. Bauer, M.D., Detroit.

HOUSE OF DELEGATES ACTIONS—1955

The 1955 MSMS legislative body, meeting in Grand Rapids, September 26-27, adopted resolutions concerning: (a) appreciation of public service rendered by R. L. Novy, M.D., Detroit; (b) Beaumont Memorial preservation; (c) screening of foreign interns; (d) Jenkins-Keogh Bill; (e) "Medic"— commendation to the Los Angeles County Medical Society; (f) medical representation on Voice of America; (g) fee for examina-

(Continued on Page 12)

KNOX Protein Previews



New Booklet Presents Latest Facts on Feeding the Sick



Adequate nutrition during illness and convalescence is essential for recovery whether the patient is managed in the hospital or at home. In the latter case, physicians often must devote much time to instructing those responsible for caring for the sick in good nutritional practices.

"Meal Planning for the Sick and Convalescent" has been designed to relieve you of the need for repeating over and over again essential dietary facts. This new Knox booklet presents in layman's language the latest nutritional applications of proteins, vitamins and minerals, gives practical hints on serving food to adults and children, suggests ways to stimulate appetite and describes diets from clear liquid to full convalescent. Best of all it offers the homemaker for the first time detailed daily suggested menus for each type of diet, plus 14 pages of tested nourishing recipes.

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HOUSE OF DELEGATES ACTIONS—1955

(Continued from Page 10)

tion of mentally ill; (h) possible optometric legislation; (i) creation of Occupational Health Section; (j) driver training; (k) AMA Study Committee on Highway Accidents; (l) appreciation of service rendered by L. A. Drolett, M.D., Lansing; (m) Speedy recovery for President Eisenhower; (n) Committee on Division of Fees (MMS); (o) California Cancer Commission; (p) periodic health examinations by hospital staffs; (q) hospital privileges (approved as amended); (r) hospital facilities for the mentally ill (approved as amended); (s) study of surgical fees—Blue Shield (approved as amended); (t) contributions to Beaumont Memorial (approved as amended). (u) Blue Shield reporting in mediation cases.

The House adopted substitute resolutions concerning: (a) propaganda on Salk vaccine; (b) pollution of inland waterways; (c) expansion of AMA administrative facilities; (d) non-scientific sessions at AMA Conventions.

Referred: (a) to introducer, for clarification, a resolution re Joint Commission on Accreditation of Hospitals; (b) to MSMS Mental Health Committee for study a resolution re increasing hospital personnel for the mentally ill.

Disapproved by the House were resolutions concerning: (a) county society membership; (b) fluoridation of water; (c) old age and survivor's insurance program—but recommended that county medical societies conduct polls of their memberships on this question; (d) election of Executive Committee of The Council.

Individual M.D. Affected

Many resolutions were of general interest, affecting Medicine as a whole. The following resolutions touched the individual practitioner, in his day-to-day existence:

Resolution Re Blue Shield Reporting in Mediation Cases

Amended resolution approved by 1955 MSMS House of Delegates

WHEREAS, the county and state medical societies are charged with the responsibility of maintaining a high standard of integrity and ethics within our profession, and

WHEREAS, it is the moral duty of every member to report obvious violations of this Code, and

WHEREAS, the Blue Shield organization has at the present time no adequate liaison with the various county medical societies in such matters, and

WHEREAS, problems involving integrity are bound to arise between the Blue Shield organization and individual doctors of medicine; therefore be it

RESOLVED: That the Blue Shield organization, upon receipt of any letters or communications alleging abuse, which are outside the province of the present Liaison Committee between the Michigan State Medical Society and Blue Shield, be advised to communicate with the complainants, suggesting that they should submit their complaint directly to the local county medical society.

Amendment approved by the 1955 House of Delegates

That all complaints not handled by the Liaison Committee will be referred by Michigan Medical Service back to the county medical society, and a letter is to be sent to the complainant informing him of the disposition by them of his complaint.

Resolution Re Periodic Health Examinations by Hospital Staffs

Approved by 1955 MSMS House of Delegates

WHEREAS, certain organizations demand periodic examination of certain of their members, and

WHEREAS, certain hospital staffs have been organized to conduct these examinations, and

WHEREAS, there arises the question of interference with the patient-physician relationship which represents the basic philosophy of the best method of medical practice, and

WHEREAS, such examinations take hospital beds away from sick people and may make it necessary to build hospitals for examination purposes rather than for care of the sick; therefore be it

RESOLVED: That county medical societies and hospitals in various communities in the State should be requested to send in reports on how the problem has been handled in their localities; and be it further

RESOLVED: That each participating physician, who is not regularly employed by the hospital, render his own bill and make sure that it is clearly identified in any complete bill rendered; and be it further

RESOLVED: That the major part of these examinations be conducted in the doctors' offices or outpatient departments in order to conserve beds for the sick; and be it further

RESOLVED: That the hospital medical staffs choose the physicians for these examinations by rotation from all those qualified to conduct such examinations; and be it further

RESOLVED: That while hospital medical staffs may agree on a local solution to this problem, each hospital staff must not lose sight of the physician-patient relationship, which is primarily the concern of the county medical society as a unit.

Resolution Re the Jenkins-Keogh Bill

Approved by 1955 MSMS House of Delegates

WHEREAS, physicians as a self-employed group have been discriminated against in the matter of an allowance for pension plans as a pretax offset against income tax, and

WHEREAS, the Jenkins-Keogh bill now under consideration in Congress provides for a decent measure of correction of this inequity, and

WHEREAS, by the merit of its being voluntary and capable of expansion to meet individual needs, the Jenkins-Keogh bill is to be preferred over compulsory and self-vitiating social security; therefore be it

RESOLVED: That the Michigan State Medical Society support the Jenkins-Keogh bill; and be it further

RESOLVED: That copies of this resolution be sent to all Congressmen and both U. S. Senators from the State of Michigan.

HEALTH INSURANCE AT RECORD HIGH

Nearly two out of every three men, women, and children in the United States now are protected by voluntary health insurance, according to the most recent survey of the Health Insurance Coun-

(Continued on Page 14)

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*Schaefer, F. H.: Ohio State M. J. 51:347 (April) 1955.



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HEALTH INSURANCE AT RECORD HIGH

(Continued from Page 12)

cil. As reported in the Council's ninth annual survey, the total of benefit payments on health insurance claims exceeded 2.7 billion dollars in 1954 (the most recent figures available), a gain of 11 per cent over the previous year.

Of this total amount, more than half went to help meet the hospitalization expenses of beneficiaries, and more than 730 million dollars went for surgery and medical care.

At the time of the survey, a total of 101,493,000 Americans had hospital expense protection, nearly eight and one-half times the number in 1941. Almost 86,000,000 persons had surgical expense protection, indicating that approximately 85 per cent of those with hospital expense protection also had surgical coverage. The number of persons with surgical insurance has multiplied about 16 times since 1941.

Regular medical expense coverage increased by more than 4,000,000 persons during the year, bringing the total to more than 47,000,000, an increase of nearly 11 per cent during a single year.

HOSPITAL CARE

Efficiency and medical progress are cutting the cost of hospital care. A. C. Kerlikowske, M.D., director of University Hospital, University of Michigan, has released statistics in his annual report which show that today's patient is actually spending less money for hospital care than he did five years ago. The reason: The patient is discharged, on the average, three days sooner. This means a savings of $90 to $120 on the patient's final bill.

Five years ago, the average stay per patient at University Hospital was fifteen and a half days. Since then, it has been cut to twelve and a half days. Thus, in the battle between economics and medical progress, the patient is the victor, even though he may not realize it when immediately confronted with his hospital bill.

Declared Dr. Kerlikowske:

"We feel that in any discussion involving the high cost of living today, hospitals are shoved against the wall. That is why the University Hospital is releasing its annual report to the public for the first time.

"Explanations do not pay bills, but they often help remove feelings of resentment."

The University Hospital director revealed that approximately 72 per cent of the patients entering the hospital are paying patients (either by insurance or personal funds). On the other hand, 28 per cent receive financial support from county or state agencies.

The report also disclosed, on the basis of a study of 1000 consecutive admissions, less than half these patients carried hospitalization insurance. While this seems to indicate continued inadequate preparation for the emergencies of illness "the trend is for more people to be covered by insurance."

The University Hospital director said he believed no hospital seeks to price itself deliberately out of business. "Yet, no hospital can afford to sacrifice quality for the sake of reduced costs."

The director also said he was convinced that while people like to shop around for savings in automobiles, clothing, and home maintenance, they should not look for medical bargains.

The University Hospital instituted monthly cost reports to determine areas of potential savings. The report showed that by this means a single nursing unit was able to save the hospital $6500 in linen costs alone.

"Our budget calls for an expenditure of a thousand dollars an hour, twenty-four hours a day, seven days a week."

The director revealed other interesting statistics:

1. 1,250,000 meals prepared in the main kitchen this year
2. 4,000,000 pounds of linen used
3. 1,524 babies born in Women's Hospital
4. Approximately 9,000 operations performed
5. A payroll of seven million dollars
6. 3,118 people employed, of whom 72 per cent are female
7. 200,033 outpatient visits, or an increase of 10 per cent
8. Less than 2 per cent of the charges "written off," compared to the national average of 3.6 per cent.

Commenting on this record, Dr. Kerlikowske said:

"Modern hospitalization today is a remarkable example of what can happen when sound business policy works hand-in-hand with the advancement of medical science; the patient is the immediate beneficiary of this type of co-operation."

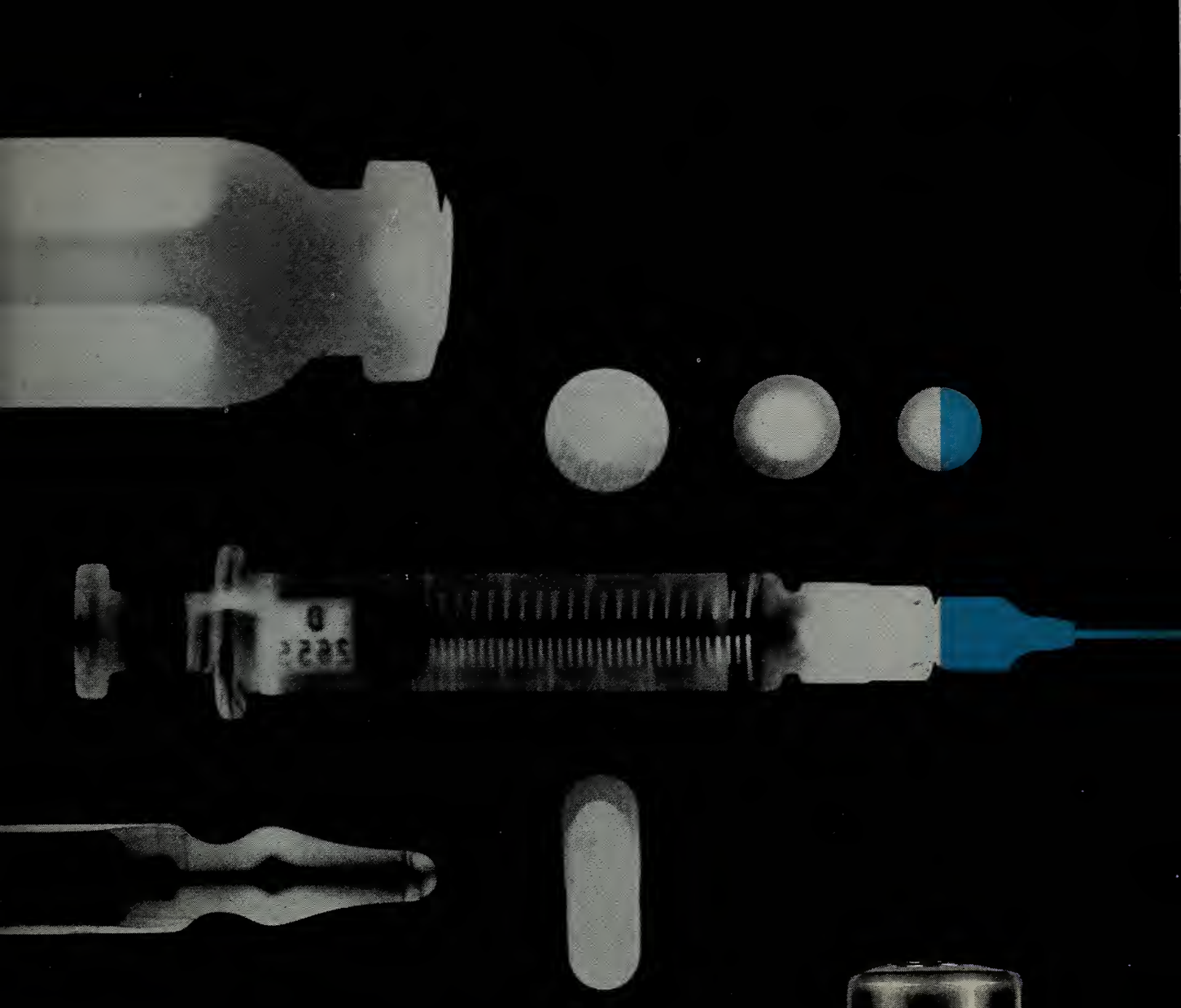
HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of November 16, 1955

Ninety-five items were presented the Executive Committee of The Council at its November 16 meeting in Detroit. Those of chief importance were:

- **Action on resolutions adopted by 1955 House of Delegates:** (a) Resolution re periodic health examinations by hospital staffs—The Council instructed that copies be sent to the chairmen of medical staffs of accredited hospitals in Michigan, to members of the Michigan Industrial Medical Association, and to the secretaries of component county societies, with an accompanying letter; (b) resolution re Salk vaccine propaganda—this was referred to the AMA Delegates from Michigan for consideration; (c)

(Continued on Page 16)



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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 14)

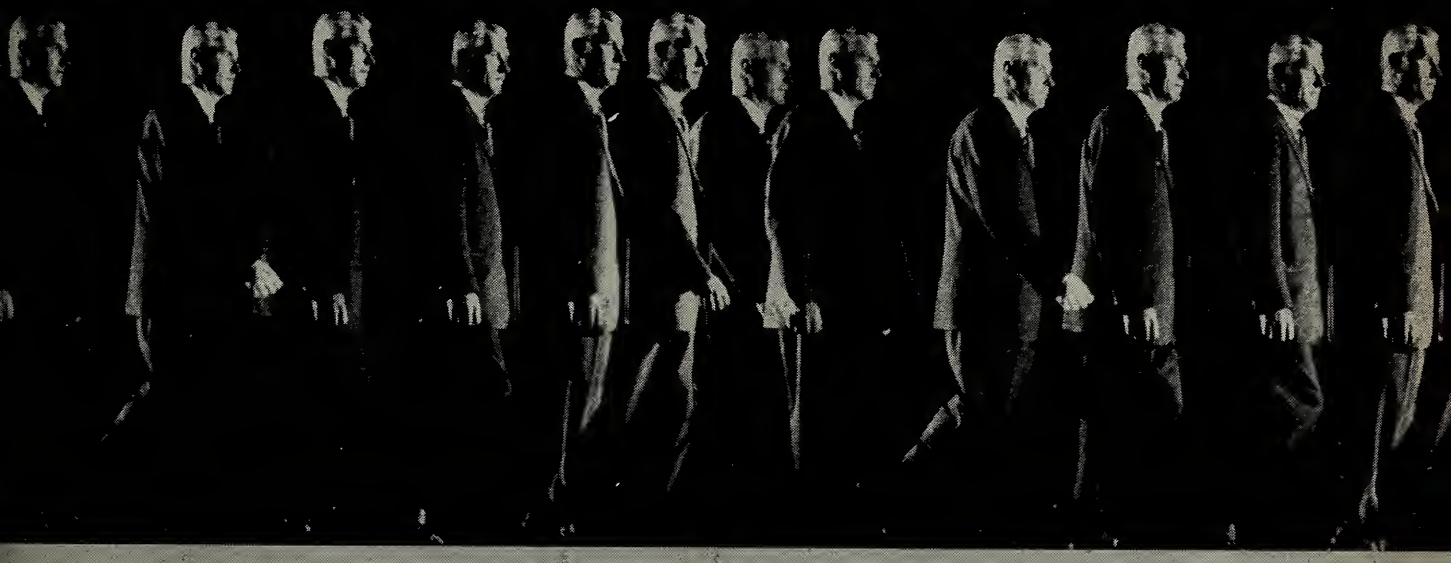
Resolution re fee for examination of the mentally ill—referred to each component society to ask for the probate judge or judges in its area to increase the fee, and that similar request be made by MSMS to the Michigan Probate Judges Association; (d) resolution re Blue Shield reporting in mediation cases—a copy of this amended resolution with accompanying letter is to be sent to Michigan Medical Service, and also to be inserted in the next Secretary's Letter to county society officers.

- **Committee reports.** The following committee reports were presented: (a) Committee Organizational meeting, October 20; (b) Geriatrics Commmittee, October 25; (c) National Defense Committee, November 2; (d) Highway Accidents Committee, November 10; (e) Mental Health Committee—report of R. W. Waggoner, M.D., recommending study of expert testimony; the Executive Committee appointed a committee of three to work jointly with a similar committee of the State Bar of Michigan to study an inter-professional guide between medical witnesses and lawyers: Personnel of the Committee—W. M. LeFevre, M.D., Muskegon, A. A. Humphrey, M.D., Battle Creek; and Francis B. MacMillan, M.D., Detroit; (f) Liaison Committee with State Executive Office, October 20; (g) Committee of Past Presidents, September 28.
- **American Association of Medical Assistants.** Ralph W. Shook, M.D., of Kalamazoo, reported on organizational meetings held in Kansas City on November 4-6 to develop a national medical assistants society at which 83 medical assistants, representing 14 states, were present.
- **Report of AMA Delegates caucus, held this date.** Wm. A. Hyland, M.D., Grand Rapids, Chairman, reported on the following resolutions adopted by the 1955 MSMS House of Delegates: (a) medical representation on Voice of America. approved by the Delegates for reference to AMA Washington Office; (b) resolution re AMA Study Committee on Highway Accidents and resolution re presidential appointment of national commission to regulate and standardize safety devices on automobiles—approved for presentation to AMA House of Delegates in Boston; (c) resolution re optometric legislation—copy of this resolution is to be forwarded to the AMA Board of Trustees; (d) resolution re report of AMA Committee on Medical Practice (hospital privileges)—the reworded resolution was approved for introduction into the AMA House of Delegates at Boston; (e) resolution re alphabetical listing of Hawaii and Alaska in AMA publications, and resolution re request to AMA Secretary and editor to observe alphabetical listing of all component societies in delegates handbooks—approved for introduction into AMA House of Delegates at Boston.

 A recommendation of the Delegates that MSMS By-Laws be changed so that AMA Delegates and Alternate Delegates take office as of January 1, following their election in September, was referred to the By-Laws Committee for consideration.
- **President W. S. Jones** presented letter from Medical Director Wm. S. Middleton, M.D., of the Veterans Administration, suggesting termination by July 1, 1957 of all existing contracts with intermediaries (Michigan Medical Service in Michigan) in the home-town medical care plan. Appropriate action was referred to President Jones and Editor Haughey for implementation.
- **Don F. Cudner, M.D.,** Jackson, was appointed as a member of the MSMS Industrial Health Committee.
- **A Liaison Committee** to the Michigan State Board of Registration in Medicine was appointed as follows: W. S. Jones, M.D., Menominee, Chairman; L. Fernald Foster, M.D., Bay City; A. C. Furstenberg, M.D., Ann Arbor; G. H. Scott. Ph.D.; E. W. Schnoor, M.D., Grand Rapids; E. C. Swanson, M.D., Vassar.
- **Committee on Arrangements for Testimonial Luncheon** to Michigan physicians who in March, 1956, will be presidents of national Medical Associations was selected.
- **M. A. Darling, M.D.,** Detroit, was appointed as Chairman of Arrangements for the 1956 MSMS Annual Session.
- **1962 MSMS Annual Session in Detroit:** Dates of September 24-28, 1962, were selected for this meeting.
- **R. C. Hildreth, M.D.,** Kalamazoo, was appointed as MSMS representative to the planning committee for Third National Cancer Conference, to be held in Detroit, June, 1956.
- **Executive Director Wm. J. Burns** was authorized to accept appointment as member of Executive Committee of Board of Directors, American Trade Association Executives, and also as Chairman of its Committee on Professional Standing.
- **Report of Special Committee** on Improving Officers Night Ceremonies was presented and approved. One recommendation was that all ancillary groups having dinner meetings on the Wednesday evening of MSMS Annual Session be invited to adjourn in time so their members may attend Officers Night ceremonies.
- **An organizational handbook** for county society officers, to be developed by MSMS and distributed at the County Secretaries-Public Relations Seminar, Detroit, January 27-29, was authorized.

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1. Pomeranze, J. et al.: Angiology, June, 1955.
2. Freedman, L.: Angiology 6:52, Feb. 1955.

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American Medical Association

Ninth Clinical Session

The Ninth Clinical Session of the American Medical Association was held in Boston, Massachusetts, November 29, 30 and December 1, 2, 1955. It was a rather enthusiastic meeting with a somewhat smaller attendance than was hoped. The weather in Boston was perfect, even though much of the rest of the nation had storms, deep snow, and high winds.

The meeting started off with the Eighth Medical Public Relations Conference, Monday, November 28. at the Statler, in Boston. Following the greetings, George F. Lull, M.D., of Chicago, Secretary and General Manager, made some announcements. The first speech was by Dwight W. Murray, M.D., Napa, California, President-Elect of the AMA who predicted an election year which will keep physicians busier than ever on all fronts.

Urging physicians to key their public relations program for 1956 to a spirit of neighborliness, Dr. Murray said it is time physicians learn to take a greater interest in their neighbors in our respective communities.

"We are no more perfect than any other group in our society," he said. "We have no monopoly on service to humanity. It is our responsibility, individually and collectively, to seek out other groups who are interested in the welfare of the community. No one is going to give one hoot in hades about the problems of the medical profession if we sit on our pedestals waiting for others to come to us."

Dr. Murray said that the medical profession has done an excellent formal public relations job, utilizing the mass media of literature, films, radio and television, and public meetings, but has often ignored the "simplest, least expensive and most effective medium of communication—word of mouth, neighbor-to-neighbor and person-to-person."

Dr. David B. Allman, Atlantic City, New Jersey, chairman of AMA's Legislative Committee, pointed out:

"There is absolute necessity for close co-ordination between public relations and legislative activities.

"Legislation is a highly complex subject. It is our job to consider each bill, not as a separate individual item, but as one piece of a large complicated puzzle."

The chairman of The Council on Medical Service, Joseph D. McCarthy, M.D., Omaha, Nebraska, summarized some of the major projects in the medical service area, and said the Council is now working on thirty-six projects, a number of which include a study of medical practice by full-time clinical teachers in medical schools and is devoting study to the development of union management health centers in which physicians are employed. Increasing emphasis by the federal government on medical care for the indigent will necessitate closer attention to this subject by medical societies, Dr. McCarthy said. He also called attention to the satisfactory growth of the Physicians Placement Service operated by The Council. Other Council projects will include development of revised standards for voluntary health insurance programs and intensified studies in the field of professional liability insurance.

F. J. L. Blasingame, M.D., Wharton, Texas, Trustee of the AMA, introduced the assistant chairman of the Board of Trustees of the Sears Foundation, James C. Worthy, of Chicago, who outlined in detail two Sears Foundation projects in the medical field: the preparation of a planning guide for establishing medical practice units, and the establishment of a loan program for physicians setting up practices.

Leo E. Brown, Director of Public Relations for the AMA, Chicago, outlined much of the work the Association will carry out during the year 1956. During the luncheon, Earle Cocker, Jr., of Atlanta, Georgia, vice president of the Delta Air Lines, talked on the future of the Nation. His visions are tremendous.

The afternoon session had as chairman, Conrad Wesselhoeft, M.D., president of the Massachusetts Medical Society. The program featured Leonard E. Read, Irvington on Hudson, president of the Foundation for Economic Education, speaking on "Snowballing Social Security." Hon. Thomas B. Curtis, Representative from Missouri, Congress of the United States, talked intimately of various legislative matters. V. C. Royster, New York City, Senior Associate Editor of the *Wall Street Journal,* spoke of the doctor's future in America. It can be great, if we make it so. Senator Wallace F. Bennett, of Salt Lake City, Utah, United States Senate, presented the question, "Is Free Enterprise Here to Stay?" Edward J. McCormick, M.D., Toledo, Ohio, past president of the AMA, summarized.

House of Delegates

The House of Delegates met in the Grand Ballroom of the Hotel Statler Tuesday morning, November 29, 1955. Roll call demonstrated 100 per cent attendance. Announcements, outlines of the Reference Committees, and room assignments took considerable time.

Named as the 1955 General Practitioner of the Year was Dr. E. Roger Samuel, of Mount Carmel, Pennsylvania, whose selection by a special committee of the Board of Trustees was announced at

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NINTH CLINICAL SESSION

(Continued from Page 20)

the opening session on Tuesday. Dr. Samuel, a former member of the House of Delegates and a general practitioner for thirty-five years, received the medal and citation presented annually for community service by a family doctor.

Dr. Gunnar Gundersen, AMA Board chairman, who made the award to Dr. Samuel, also presented a special citation to Dr. Torald Sollmann, of Cleveland, Ohio, charter member of the AMA Council on Pharmacy and Chemistry for more than fifty years and its chairman since 1936. Dr. Sollmann, eighty-one years old, was honored for his "outstanding service to the medical profession and on behalf of the advancement of medical science."

Elmer Hess, M.D., Erie, Pennsylvania, president of the American Medical Association, in his comments regarding the coming year, said:

"We are moving along in the right direction. But before we can successfully achieve the objectives we proclaim to the public, we have to deal with some critical problems affecting internal relationships in the field of medicine."

He cited as one problem the difference of opinion between some hospitals and the anesthesiologists, radiologists and pathologists in regard to operating policies. He called for intelligent discussion of this question across a conference table with the thought uppermost in the minds of all concerned that "the welfare of the patients supersedes everything else."

Dr. Hess also discussed the question regarding private practice of medicine by medical school faculty members and said he thought temperate discussions would help solve the problem on the basis of the needs of the situation in a manner befitting intelligent mature men.

Recommendations of the committee appointed to review functions of the Joint Commission on Accreditation of Hospitals may help eliminate certain points at issue, Dr. Hess said. He added that citizens of this country, hospitals and the medical profession owe much to the Joint Commission for the protective service which it has always rendered.

"I think also that one of our greatest internal problems is a reluctance to recognize the fact that we are not cast from a perfect mold. A major responsibility which we have to the people we serve is to assure them of top quality medical care by men of unquestionable integrity. American medicine will always serve our nation and its people with unwavering devotion."

Social Security

Major legislative policy action taken at the Boston meeting involved H.R. 7225, known as the Social Security Amendments of 1955. This bill, which was passed last summer by the U. S. House of Representatives and is now pending before the Senate Finance Committee, includes a proposal for federal cash benefits to selected individuals judged to be permanently and totally disabled. The House of Delegates adopted a substitute resolution proposed by the Reference Committee on Legislation and Public Relations to combine the intent of four resolutions and three supplementary reports of the Board of Trustees dealing with H.R. 7225 and other aspects of Social Security. The substitute resolution stated the following policy:

"That the American Medical Association reiterate in the strongest possible terms its determination to resist any encroachment upon the American system of medical practice which would be detrimental to our patients, the American people;

"That the American Medical Association urge and support the creation of a well-qualified commission, either governmental or private or both, to make a thorough, objective and impartial study of the economic, social and political impact of Social Security, both medical and otherwise, and that the facts developed by such a study should be the sole basis for objective non-political improvements to the Social Security Act, for the benefit of all of the American people;

"That the American Medical Association pledges its wholehearted co-operation in such a study of Social Security in the United States, and will devote its best efforts to procuring and providing full information on the medical aspects of disability, rehabilitation and medical care of the disabled, and

"That copies of this resolution be transmitted to the President of the United States, to all members of the Cabinet, to all members of the Congress, and to all constituent state medical associations."

OASI Coverage of Physicians

In another action on social security, the House passed the following resolution designed to determine the exact attitude of physicians toward compulsory or voluntary coverage under the social security system:

"WHEREAS, Misunderstanding exists about the position of the medical profession on the question of the inclusion of physicians in the Old Age and Survivors' Insurance provisions of the Social Security Act; therefore be it

"RESOLVED, That the House of Delegates of the American Medical Association recommend to state societies that they poll their entire membership on this question and that the results of the poll be transmitted to the Board of Trustees of the American Medical Association as soon as possible."

Report on Medical Practices

The House passed a substitute resolution offered by the Reference Committee on Insurance and Medical Service to implement the findings and recommendations of the Committee on Medical Practices (Truman Committee), which studied the basic causes leading to certain unethical practices and unfavorable publicity. The resolution, adopted with the proviso that it is subject to review by legal counsel, includes the following points:

"That a Continuing Committee on Medical Practice be created in the American Medical Association to conduct a study of the relative value of diagnostic, medical and surgical services and to report its findings and recommendations to this House in the same manner as is now followed by other committees and councils of the Association;

"That this committee shall consist of five members of the House appointed by the Speaker, three of whom shall be general practitioners; . . .

"That this committee be directed to utilize all possible means to stimulate the formation of a department of general practice in each medical school;

"That the American Medical Association approve of the medical school teaching programs which afford the medical student opportunity for experience in the general practice of medicine;

"That the representatives of the American Medical Association on the Joint Commission on Accreditation of Hospitals be instructed to stimulate action by that body leading to the warning, provisional accreditation or removal of accreditation of community or general hospitals which exclude or arbitrarily restrict hospital privileges for generalists as a class regardless of their individual professional competence, after appeal to the Commission by the County Medical Society concerned;

"That this committee co-operate in every way and assist the Public Relations Department of the American Medical Association to present a program of public education designed to bring about a better understanding of all fields of medical practice, and

"That this committee use its full influence to discourage any arbitrary restrictions by hospitals against general practitioners as group or as individuals."

In a complementary action on the same subject, the House also approved a supplementary report of the Board of Trustees which included the following suggestions:

1. All non-surgical groups should be asked for their suggestions and co-operation in carrying out a public education program on the value of diagnostic and medical work.
2. The various specialty boards should be encouraged to reappraise the practice restrictions on their board diplomates.

The interest in the report of the special Committee on Medical Practices given by Chairman J. S. DeTar, of Michigan, was evidenced by the attendance at the Reference Committee, approximately 200, and by the forty-four who discussed the report. The discussion centered on hospital privileges for the general practitioner, and all agreed it is time for definite constructive action. The House voiced its objection to arbitrary discrimination to general practitioners as general practitioners and reiterated its 1948 policy: "Hospital staff appointments should depend on the qualifications of physicians to render proper care to hospitalized patients as judged by the hospitals and not on certification or special society membership."

Accident Prevention

The House approved two resolutions from Michigan on accident prevention, urging legislation for the appointment of a national body to approve and regulate safety standards of automobile construction. This was referred to the Committee on Crash Injuries. They requested the Board of Trustees to study the prevention of highway accidents.

Medical Care Plans

The Committee on Medical Care Plans is conducting a comprehensive study of the nature and methods of operation of the various types of plans through which persons receive the services of physicians. It will try to evaluate the effects of these plans on the quality and quantity of medical care provided. Similar committees in the constituent societies were recommended.

Several resolutions attempted to place the American Medical Association squarely in support of the medically sponsored medical care plans. By resolution, "The House of Delegates commended the more than 100,000 AMA members who are participating and co-operating in the physician-sponsored prepaid medical care plans and reaffirmed its approval of these plans; congratulated the Blue Shield Association of Medical Care Plans for its accomplishments."

AMA Daily Bulletin

Mrs. George W. Slagle, wife of one of Michigan's delegates, was interviewed and was quoted:

"A doctor's wife should be cordial and gracious, and should always keep a smile on her face. In other words, always be patient while dealing with patients."

Medical Ethics

A proposed revision of the "Principles of Medical Ethics and Precepts of Manners of the American Medical Association" was submitted to the House by the Council on Constitution and By-Laws. The following reference committee suggestion was adopted by the House:

"In discussion, it became evident that there was need for wide distribution of these principles and careful study of the proposed changes not only by this Reference Committee but also by all members of the House and in fact all members of the Association. It seemed desirable also that the two Councils (Council on Constitution and Bylaws and the Judicial Council) should meet in joint session to consider these proposals. Your Reference Committee therefore recommends that these proposals be tabled for further consideration at the next annual session of the House to be held in Chicago in June, 1956.

"In the meantime, it is recommended that these proposals in their entirety be widely publicized and that consideration be given to publishing, in the Journal of the American Medical Association and also in state medical journals, these proposed changes in the Principles. It is also recommended that consideration be given to the mailing of copies to each member of the Association. Finally, your Reference Committee recommends that prior to the meeting in Chicago next June the Council on Constitution and Bylaws and the Judicial Council meet in joint session to consider these proposed changes."

In another action on revisions of medical ethics, the House also approved a plan requiring that all resolutions dealing with changes in the Principles of Medical Ethics shall be considered over a period between sessions of the House before final adoption.

Miscellaneous Actions

Among many other actions on a variety of other subjects, the House of Delegates also:

Recommended that the Board of Trustees give consideration to a dues increase for all Association members, with the increase designated for contribution to the American Medical Education Foundation;

Adopted a resolution on the practice of pathology declaring opposition to "the division of any branch of medical practice into so-called technical and professional services";

Recommended that further purchase and distribution of Salk polio vaccine be carried on by the presently available commercial avenues used for other immunizing agents, and that all vaccines, once proven, should enter the usual channels of distribution;

Approved appointments of an AMA committee to study the prevention of highway accidents;

Commended the Women's Auxiliary of the AMA for its financial contributions in support of medical education and requested the Auxiliary to continue its active efforts;

Commended the Sears Rosebuck Foundation for its thoughtfulness and foresight in sponsoring the new plan for financial assistance in establishing medical practice units;

Received progress reports from the Commission on Medical Care Plans and from the AMA Law Department on its studies of professional liability;

Approved a Board of Trustees recommendation that the State Journal Advertising Bureau be separated from the American Medical Association and be given full autonomy;

Congratulated the physicians of Iowa for their efforts in supporting the position that the practice of medicine is the right of the individual, and

Approved the selection of Minneapolis for the 1958 Clinical Meeting and Chicago for the 1960 Annual Meeting.

Opening Session

Dr. Elmer Hess, AMA president, told the opening session of the House that complacency should be regarded as the medical profession's greatest enemy. Although good progress is being made in informing the public and the profession of the objectives of organized medicine, he said, educational efforts must be intensified and the list of physicians' tangible accomplishments for the health benefit of the public must be increased.

Dr. Leo H. Bartemeier, chairman of the AMA Council on Mental Health, told the House that the new Joint Commission on Mental Illness and Health will be ready to embark on its nation-wide study and re-evaluation of the human and economic problems of mental illness after the first of the year. Dr. Bartemeier, who is chairman of the Board of Trustees of the Commission, appeared before the House to explain the functions of the new commission, which was organized to carry out the Mental Health Study Act passed by Congress earlier this year without a dissenting vote in either house.

Scientific Section

On the scientific side, many papers and panels were presented in Surgery, Gynecology and Internal Medicine, with Pediatrics and Mental Diseases considered under the latter heading.

Surgery of the heart and great blood vessels received much attention, demonstrating marked forward strides since the early days of this approach to the subject just a few years ago. The dramatic open heart surgery of Lillehei and others had a great appeal as the discussions and film presentations drew crowded halls. Surgery of the upper abdomen, with advances in neurological surgery, received much attention.

Drugs that give a lift to older people without harmful side effects and tranquilizers, the latter causing relaxation without depression, created considerable excitement.

Smoking in relation to emphysema brought forth another facet in the much-discussed relation of smoking to coronary and vascular disease as well as cancer of the lung.

Progress on the Salk vaccine in relation to the treatment of poliomyelitis was further evaluated, with the result that the horizon is becoming much clearer.

Nutrition for all ages received more than usual attention, as the subject was spelled out in a much more intimate manner than heretofore, when one was told to use so many grams or calories of this and that and it was called a day.

The usual advice was given not to have the nurse or office assistant prepare a hypodermic before the patient completed the first sentence of his history, especially was this so in the use of the newer drugs in regard to colds or virus infections. Give the patient at least the courtesy of a few moments to tell his story; this will make for better doctor-patient relations and, incidentally, one might change one's mind about giving the "shot" after all.

In surgery of trauma, especially crash injuries, many worthwhile suggestions as to beneficial treatment by the use of plastic splints and lighter cast material for earlier and safer ambulation were enthusiastically received.

The specialty groups, especially skin and allergy, offered much enlightening material with a recommendation that the general practitioner could

(Continued on Page 26)



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NINTH CLINICAL SESSION

(Continued from Page 24)

handle a great many of these cases. The mental group also emphasized that the internist and generalist could greatly aid a large number of their milder mental patients without referring them to the psychiatrist.

Medical Education Contributions

The AMA Board of Trustees announced that it again has appropriated $100,000 to be contributed to the American Medical Education Foundation for the support of medical schools. The California Medical Association presented a $25,000 check to the AMEF, and the Utah State Medical Society announced an $11,000 contribution.

Michigan Delegation

The House of Delegates took cognizance of the absence of two of Michigan's delegates. A telegram was sent to Wyman Barrett. M.D., of Detroit, expressing their wish for his speedy recovery, and voiced their regret at the resignation of Ralph Johnson, M.D., of Detroit. Seated in their places were Clarence Owen, M.D., of Detroit, and George W. Slagle, M.D., of Battle Creek. The Michigan delegation conscientiously attended all sessions of the House and the Reference Committees. Three served on such committees. The delegation was ably directed by William A. Hyland, M.D., Grand Rapids, who is chairman. The complete official family from Michigan met at breakfast each day to hear reports, meet distinguished visitors from other states and the president-elect of the AMA. Daily contacts were outlined, especially the places in reference committees which needed to be watched, and advised on special subjects.

The final registration was 8,637, including 3,779 physicians. This compared with a total at Miami of 7,707 including 3,253 physicians.

(In preparing this report of the AMA Session notes taken at the meeting have been amplified by clippings, an official digest from the AMA in Chicago, and two or three paragraphs obtained through the kindness of Miss Koheed, Executive Secretary of Wayne County Medical Society also of Dr. Hyland.)



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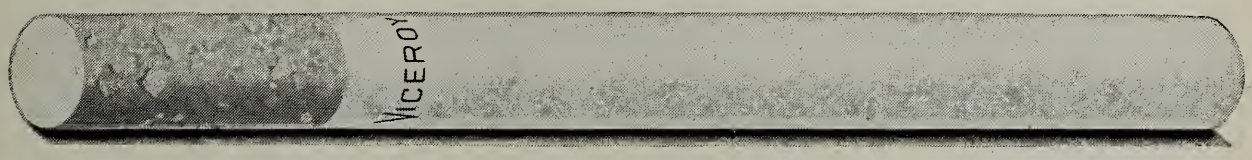
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Heart Beats

HEART RESEARCH GRANTS ANNOUNCED



L. Paul Ralph, M.D., Grand Rapids, President of the Michigan Heart Association, recently announced that the Association has appropriated more than $142,000.00 for twenty-five cardiovascular research projects in Michigan.

"This investment in research aimed at increasing our knowledge of the cardiovascular diseases has been made possible by public contributions to 'United' fund-raising campaigns in many Michigan communities and through memorial contributions," Dr. Ralph said. "Each project eventually contributes to the care, diagnosis and treatment of all heart patients."

Of the research funds allocated by the Michigan Heart Association the sum of $59,015.00 has been awarded from the Association's Memorial Fund. This Fund was established at the request of many persons who have wanted an opportunity to provide a "living memorial" to the memory of a friend, relative, or associate who has been afflicted with heart disease. Dr. Ralph pointed out that memorial contributions are used exclusively for heart research studies and no administrative costs whatever are charged against this fund.

RECORD AHA MEETING CHOOSES OFFICERS

More than 2,500 persons including approximately 2,000 physicians and medical students attended the American Heart Association's thirty-first Annual Meeting and twenty-eighth Annual Scientific Sessions in New Orleans, October 22-28, 1955. It was the largest medical gathering ever sponsored by the Association, as well as the first held independently of any other major medical meeting.

A highlight of the week's proceedings was the installation of Irvine H. Page, M.D., Cleveland, as President of the Association, and the choice of Edgar V. Allen, M.D., Rochester, Minnesota, as President-elect.

Five Michigan residents, including four M.D.s, were elected to the Board of Trustees of the American Heart Association. They are: Warren B. Cooksey, M.D., Detroit; Leon DeVel, M.D., Grand Rapids; Sibley Hoobler, M.D., Ann Arbor; E. A. Irvin, M.D., Dearborn; Frank M. Isbey, Detroit.

SEVENTH ANNUAL MICHIGAN HEART DAY

The Seventh Annual Scientific Sessions and Annual Meeting of the Michigan Heart Association has been scheduled for Thursday, March 8, 1956, in conjunction with the Clinical Institute of the Michigan State Medical Society. This is a departure from previous years when the meetings were held on Fridays. Another outstanding Scientific Program has been arranged with the following papers to be presented:

"Prevention and Prophylaxis of Rheumatic Fever"
Benedict F. Massell, M.D.—Boston, Massachusetts

"Interatrial Septal Defects—Its Clinical Cause and Surgical Correction"
Anthony C. Nolke, M.D., and James Blodgett, M.D.—Detroit, Michigan

"Diuretics In The Treatment of Congestive Heart Failure"
Y. Morita, M.D.—Detroit, Michigan

"Clinical Evaluation of Sinthrom (G-23350), A New Oral Anticoagulant"
J. A. Polhemus, M.D.—Ann Arbor, Michigan

"Epidemiological Aspects of Heart Disease"
Ancel Keys, M.D.—Minneapolis, Minnesota

MEMBERSHIP IN THE MICHIGAN HEART ASSOCIATION

The Michigan Heart Association, which was formed by a committee of the Michigan State Medical Society, extends a cordial invitation to all medical doctors to become active members in the Association. Membership is open to any Doctor of Medicine who is interested in the objectives and activities of the Association. A five dollar investment in annual voting membership dues will pay regular and extra dividends including the following:

1. One-year subscription to *Modern Concepts of Cardiovascular Disease* (4 copies).
2. One-year subscription to *Michigan Heart Newsletter* (4 copies).
3. One-year subscription to *American Heart Newsletter* (4 copies).
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(Continued on Page 38)

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Additional contributors, May, 1954, to November, 1955, were the following:

W. I. Anderson, M.D., Detroit; W. L. Anderson, M.D., Detroit.

H. A. Barbour, M.D., Mayville; C. P. Barker, M.D., Birmingham; Branch County Medical Society; H. J. Butler, M.D., Detroit.

F. J. Chapin, M.D., Bay City; Ferdinand Cox, M.D., Jackson; J. H. Curhan, M.D., Detroit.

R. L. Dana, M.D., [illegible] ed Dean, M.D., Sagola; S. M. Delaini, M.D., Detroit; S. G. Delbert, M.D., Kalamazoo: T. J. Dillon, M.D., Paw Paw; W. M. Dodge, M.D., Battle Creek; B. J. Dowd, M.D., Kalamazoo; E. J. Dranginis, M.D., Detroit.

C. D. Eaton, M.D., Detroit; A. W. Erkfitz, M.D., Detroit.

G. S. Fisher, M.D., Detroit; G. A. Ford, M.D., Detroit; F. S. Fordell, M.D., Detroit; C. H. Frantz, M.D., Grand Rapids; G. C. Frederickson, M.D., Detroit; Paul M. Fuller, M.D., Kalamazoo; J. H. Fyvie, M.D., Manistique.

Genesee County Medical Society; N. S. Gimbel, M.D., Detroit; H. I. Ginsberg, M.D., Detroit; C. H. Gordon, M.D., Ann Arbor; Heman Grant, M.D., Lewiston; J. P. Gray, M.D., Detroit; F. E. Greifenstein, M.D., Detroit; Otto Grob, M.D., Detroit.

William D. Harrelson, M.D., Kalamazoo; Leroy G. Harris, Jr., M.D., Detroit; G. H. Hause, M.D., Detroit; H. S. Heersma, M.D., Kalamazoo; W. N. Herbert, M.D., Kalamazoo; D. W. Hesselschwerdt, M.D., Detroit; Joseph Hickey, M.D., Detroit; H. B. Hoffman, M.D., Ludington; Fred J. Hohn, M.D., Saginaw; Mrs. Josephine Howard, Kalamazoo; R. G. Howard, M.D., Kalamazoo; R. E. Hull, M.D., Detroit; V. G. Hunt, M.D., Detroit.

E. J. Inga, M.D., Detroit; Ionia-Montcalm County Medical Society; William D. Irwin, M.D., Kalamazoo; B. B. Israel, M.D., Detroit.

J. M. Jacobowitz, M.D., Three Rivers.

C. E. Kahlke, M.D., Benton Harbor; Ralph Kernkamp, M.D., Detroit; William B. Kerr, M.D., Saginaw; D. A. Koch, M.D., Port Huron; P. A. Koestner, M.D., Kalamazoo.

B. H. Larsson, M.D., Detroit; Hartman Lichtwardt, M.D., Detroit; Livingston County Medical Society: L. S. Linkner, M.D., Detroit; James W. Loynd, M.D., Kalamazoo; Arno B. Luckhardt, M.D., Chicago, Illinois.

H. A. Machin, M.D., Kalamazoo; J. G. Malone, M.D., Kalamazoo; A. R. Marsh, M.D., Detroit; S. G. Meyers, M.D., Detroit; G. F. Mitchell, M.D., Detroit; George Mogill, M.D., Detroit; J. G. Montgomery, M.D., Detroit.

J. W. Nagle, M.D., Wyandotte.

Ellery A. Oakes, M.D., Manistee; Marjory Osborn, M.D., Kansas City, Missouri; Samual Osborn, M.D., Kansas City, Missouri; C. I. Owen, M.D., Detroit.

L. E. Pangburn, M.D., Detroit; J. William Peelen, M.D., Kalamazoo; R. R. Piper, M.D., Detroit; H. M. Pollard, M.D., Ann Arbor; Hazel R. Prentice, M.D., Kalamazoo; William Prevette, M.D., Pontiac; Calvin S. Purdy, M.D., Buckley.

P. O. Rague, M.D., Benton Harbor; Morris Raskin, M.D., Detroit; R. P. Reynolds, M.D., Detroit; M. L. Richardson, M.D., Lansing.

G. B. Saltonstall, M.D., Charlevoix; W. R. Sargent, M.D., Detroit; Roger A. Scholten, M.D., Kalamazoo; P. G. Schrier, M.D., Kalamazoo; L. F. Segar, M.D., Detroit; K. R. Slatmyer, M.D., Kalamazoo; B. F. Sowers, M.D., Benton Harbor; H. H. Spencer, M.D., Ann Arbor; E. H. Staley, M.D., Saginaw; A. B. Stearns, M.D., Detroit; B. W. Stockwell, M.D., Detroit; T. Stokfisz, M.D., Detroit; G. J. Stuart, M.D., Grand Rapids.

J. F. Tannheimer, M.D., Ionia; Ivan Taylor, M.D., Detroit; Myer Teitelbaum, M.D., Detroit: Isaac Terr, M.D., Charlevoix; E. G. Thorburn, M.D., Flint.

M. D. Verhage, M.D., Kalamazoo.

H. C. Walser, M.D., Detroit; R. K. Whiteley, M.D., Detroit; C. J. Williams, M.D., Detroit; Edwin M. Williamson, M.D., Kalamazoo; M. C. Wilson, M.D., Detroit; J. A. Witter, M.D., Detroit.

J. A. Young, M.D., Kalamazoo.

E. J. Zabinski, M.D., Detroit.

Ingham Society Grants $6000 to Foundation

The Ingham County Medical Society has led the way for other county societies by allocating $6,000 to the Student Loan Fund of the Michigan Foundation for Medical and Health Education, and then seeing to it that the Loan Fund was put to work immediately.

No sooner had the Fund been set up for financial assistance of junior-senior medical students residing in Ingham County, than a Lansing youth was given aid.

In congratulating the Ingham County Medical Society on its "generous action and splendid example," E. I. Carr, M.D., President of the Foundation said: "The Michigan Foundation for Medical and Health Education is glad to administer this fund . . . in fact, the Foundation exists for this very purpose—and no similar Foundation exists in the State of Michigan which devotes its entire activities to medical and health education."

The Foundation's Board of Trustees invites contributions either by a county medical society or by individual doctors of medicine. Projects may be earmarked for a specific purpose and assigned to the Foundation for expert and economical administration. All grants and donations to the Foundation are tax-exempt.



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'Thorazine' should be administered discriminately and with the care to be observed with all serious medication. Consequently, it is important that the physician, before prescribing 'Thorazine', be fully conversant with the available literature.

Smith, Kline & French Laboratories, Philadelphia

1. Howell, T.H.; Harth, J.A.P. and Dietrich, M.: Practitioner *173*:172.
*T.M. Reg. U.S. Pat. Off. for chlorpromazine, S.K.F.

AMA Washington Letter

THE MONTH IN WASHINGTON

The second session of the eighty-fourth Congress is under way, and in medical legislation—as in all other fields—this promises to be much livelier than last year's deliberations.

For one thing, neither the Republican administration nor the Democratic party, which is in control on Capitol Hill, got anywhere near as much as it wanted last year in medical legislation.

For another thing, and something that shouldn't be lost sight of at any time, both parties this year will be legislating with one eye cocked toward next November, when the voters make a choice between the two parties. Try as they might to pass laws for the good of all the people, neither party can afford to ignore the political realities of the situation: each will want to take credit for any legislation with popular appeal or where that is impossible, at least to see that the other party doesn't get the credit.

In front of this political mosaic, these are some of the medically important issues that will be fought out in Senate and House:

1. *Federal guarantee of mortgages on health facilities.*—This has been on the Congressional calendar for two years; it was pushed hard in 1954, and was given some consideration in 1955. It would mean that the federal government would underwrite mortgages for hospitals, clinics and nursing homes, under certain conditions, thereby allowing some sponsors to obtain loans they couldn't otherwise get, or to obtain them on longer terms and with lower interest.

2. *Federal grants for research facilities.*—Under this plan—approved last session by the Senate—the U. S. would make outright grants to laboratories, medical schools and clinics for building facilities for research in specific diseases, such as cancer and heart disease.

3. *Federal aid to medical education.*—This perennial project probably is closer to Congressional enactment now than ever before. The most popular bill is one restricting the federal role to grants for building and equipment, with a financial incentive held out to those schools willing to increase their enrollment. This bill may be tied in with some other grants bill, such as the one for research.

4. *Salk vaccine.*—Legislation authorizing federal appropriations for the purchase of Salk poliomyelitis vaccine ($30 million for the current year) expires February 15, virtually insuring Congressional action of some sort before that date. One issue is whether the federal government should continue the grants; more controversial is the question of whether the U. S. should move in to control the allocation and distribution of the vaccine. Allocation and distribution now are handled under a voluntary program supervised by the U. S. Public Health Service.

5. *Increases in federal appropriations for medical research.*—Over the last few years—since the National Institutes of Health came of age—Congress repeatedly has increased research grants over the amounts the Budget Bureau allowed Public Health Service to request. Indications are that this year the Budget Bureau may have to give way and allow important increases to be requested of Congress. Congress probably would want to add on its own special additions anyway, resulting in more money than ever before available for work on cancer, heart disease, mental illness, arthritis, blindness and the many other conditions.

6. *Benefits.* — OASI-covered persons could receive payments beginning at age fifty if determined to be disabled. Under present law retirement, payments for all are available at age sixty-five. The bill containing this provision (H.R. 7225) passed the House last session by an overwhelming margin. It is now before the Senate Finance Committee, where the next phase of the legislative contest will be fought out in 1956.

The lop-sided House vote on disability payments may be discontinued in part because of the parliamentary maneuvering by sponsors of the legislation. House members had only 40 minutes to debate this bill, and no opportunity to amend it. It was a case of accepting the whole bill—which contains a number of other social security liberalizations not of medical significance—or being politically damned as opposed to social security *per se.*

The American Medical Association maintains that the present expanding rehabilitation programs would be undermined by cash payments for disability, that the financial and other long-range aspects of the disability payments plan have not been thoroughly studied, and that the machinery for disability payments would inevitably project the federal government deeply into the medical care picture.

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. . . in hypertension

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As a tranquilizing agent in office practice, Raudixin produces a calming effect, usually free of lethargy and hangover and without the loss of alertness often associated with barbiturate sedation. It does not significantly lower the blood pressure of normotensive patients.

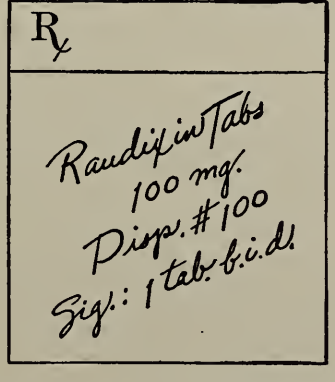
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Supply: 50 mg. and 100 mg. tablets, bottles of 100 and 1000.

*Ataractic, from ataraxia: calmness untroubled by mental or emotional excitation. (Use of term suggested by Dr. Howard Fabing at a recent meeting of the American Psychiatric Association.)



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PR REPORT

"FOUR BASIC THREATS TO HEALTH WELFARE", theme of the opening panel at the 1956 MSMS County Secretaries-Public Relations Conference, January 27-29, might well be used to set the policies for PR action by the medical profession for years to come . . . not only in Michigan, but throughout our nation. These are the four threats: Corporate Practice of Medicine, Medical Practice by Business, Encroachment of Ancillary Groups, and Broader Socialization Schemes. Analysts on the panel: a prominent attorney, a Michigan M.D. who spearheaded development of Blue Shield, an AMA delegate from the General Practice Section, and a clear-thinking Michigan Congressman.

A review of the discussion before your county medical society could stimulate some basic thinking on PR emphasis in your own community, and lay the foundation for better understanding of current trends in the many facets of the MSMS professional relations program.

PR PLANNING FOR THE PROFESSIONS, no matter what the field (law, medicine, teaching, et cetera), has certain similarities. A banker, addressing a group of lawyers at a national meeting recently, said: "Money invested in public relations will bring you a better rate of interest than if you keep it in a bank." Then he proceeded with a checklist for PR planning which is as adaptable to medical societies as it is to local bar associations:

1. Do you have an over-all plan to guide your PR activities?
2. Have the PR co-ordinating responsibilities been delegated to an individual or individuals?
3. Have you tried to originate any new PR projects?
4. Do you co-operate in community programs?
5. Do you encourage your members to participate in community service organizations?
6. Do you encourage public speaking (speakers' bureaus)?
7. Do you donate to worthy charities on an equitable basis?
8. Do you have any plan for regularly evaluating the public's opinion of your organization?
9. Do you attempt to build the prestige of the (medical) profession as a whole?
10. Do you use every available communications channel to see that your virtues are recognized?

As with so many PR fundamentals several of these entail private attitudes over which only the individual or the County Medical Society has the power of decision. Others, however, involve techniques and organizational procedures . . . the sort of thing in which MSMS is willing and able to offer counsel and guidance to county societies. The MSMS PR Department and its field staff are always ready to "lend a hand," upon request.

MEDICAL SCIENCE AND THE READING PUBLIC was the topic of a recent survey by the Research Center at the University of Michigan, and it proved that generally there is avid interest in news of medical progress. Researchers queried 200 people of varying backgrounds, social characteristics, and experiences. About three-fourths said they read science news, and about one-fourth said they read all the science news printed in their local papers.

Of special interest to the medical profession was the response to this question: "Would you be interested in having more science news and information presented in your local paper, or do you think there is enough now?"

Almost half of the 200 wanted more such coverage. Many suggested that certain types of news, including sports and society items, be curtailed to make room for wider science coverage. It's superfluous to add that the local medical society has a prime opportunity to serve its community newspapers as a source for medical news. Has your society established close liaison with local news outlets?

Incidentally, this initial U. of M. sampling was a pilot study, leading to a more comprehensive survey.

TWO SPECIAL OBSERVANCES, in which county medical societies have a chance for excellent community relations by participating on the local level, are in preparation. They are the third annual Michigan Week and the first Medical Education Week, sponsored nationwide by organized medicine in co-operation with three medical education groups.

Michigan Week, with special events on seven consecutive days, runs from May 20 through May 26. County and community committees are being formed to organize the observance, and local medical societies are urged to seize the opportunity to take part in the planning and staging.

On the state level, MSMS President W. S. Jones, M.D., is on the central committee in charge of arrangements.

Medical Education Week is scheduled for April 23-29. It will be promoted on the national scene in every type of mass medium. "Idea kits" are being distributed to state and county medical societies for developing local tie-in events. By selling Medical Education Week in your own area, you can help place the spotlight on recent advances and plans for the future in the vital field of medical education.

specific against coccic infections

Now, you can prescribe an antibiotic (*Filmtab* ERYTHROCIN) that provides *specific therapy* against staph-, strep- or pneumococci. Since these organisms cause most bacterial respiratory infections (and since they are the very organisms most sensitive to ERYTHROCIN) doesn't it make good sense to prescribe ERYTHROCIN when the infection is coccic?

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AMA News Notes

PROBLEMS OF MEDICAL EDUCATION ON CONGRESS DOCKET

The role of advanced training in the over-all medical education picture will be discussed during the opening session of the 52nd annual Congress on Medical Education and Licensure to be held February 11-14, 1956, at the Palmer House, Chicago. The meeting will be sponsored by the AMA's Council on Medical Education and Hospitals, the Federation of State Medical Boards of the United States and the Advisory Board for Medical Specialties.

Special attention will be paid to current problems in residency training such as the basic science content of a residency program, the organization and administration of a residency program and the psychiatric viewpoint in training residents during the all-day sessions on Saturday, February 11. An open meeting of the Advisory Board for Medical Specialties will be held Sunday morning, with an open meeting of the Federation of State Medical Boards in the afternoon. Monday's sessions will be devoted to discussions of trends in specialization, problems relating to clinical faculty appointments and the private practice of medicine, and new approaches in medical education. The February 14 program will be conducted by the Federation.

More than 500 medical educators, officers and members of state licensing boards and others interested in medical education are expected to attend the four-day conference.

CONFERENCE ON RURAL HEALTH SLATED FOR MARCH

"Your Doctor and You" will be the theme of the 11th National Conference on Rural Health sponsored by AMA's Council on Rural Health, March 8-10, 1956, at the Multnomah Hotel, Portland, Oregon. Chief topics to be discussed include: the family physician, mental health, programs for older people, prepaid medical care, and successful community enterprises. Ample time will be devoted to discussion and group participation.

An informal pre-conference session will be held for physicians only on Thursday morning, March 8, beginning at 9 a.m. Principal topic of discussion will be the relationship and responsibilities of a family doctor to his patients.

TATTOO RECORD OF BLOOD TYPE URGED

Universal tattooing of every person to indicate his blood type was advocated by Dr. Frank B. Berry, Assistant Secretary of Defense (Health and Medical), Washington, D. C. In a speech in Chicago, on November 4, before the 41st Clinical Congress of the American College of Surgeons, Dr. Berry said the tattooing is necessary to insure proper treatment, including transfusions of the injured, in the event of widespread civil or wartime disasters. He said, "It is no good to provide people with tags or cards, as these are frequently missing." He suggested that tattooing is the surest method and said that this can be done at the waistline, an area usually protected by a belt, or in the lower armpit, another protected area.

MEMBERSHIP IN THE MICHIGAN HEART ASSOCIATION

(Continued from Page 28)

5. Admission to Scientific Sessions of MHA and AHA.
6. New heart literature and other dividends.

Membership application and complete details may be obtained by writing to the Michigan Heart Association, Doctor's Building, 3919 John R, Detroit 1, Michigan.

MODIFIED RHEUMATIC FEVER DIAGNOSTIC CRITERIA ISSUED

Reprints of Jones Criteria (Modified) for guidance in the Diagnosis of Rheumatic Fever are being made available to the medical profession. The revised criteria were published in the September, 1955, issue of the Association's monthly bulletin for physicians, *Modern Concepts of Cardiovascular Disease.*

The modified criteria are based on the diagnostic standards first published by the late T. Duckett Jones, M.D., in 1944, and generally accepted throughout the United States and in many other nations.

In an introductory report, the Committee on Standards and Criteria for Programs of Care of the Association's Council on Rheumatic Fever and Congenital Heart Disease emphasizes that because "the tragedy which may lie in the wake of the false diagnosis of rheumatic fever may be even greater than the possible harm of missed recognition," the "criteria are necessary to minimize both overdiagnosis and underdiagnosis." The committee also places stress on the fact that the criteria are not designed to "substitute for the wisdom and judgment of the clinician."

Requests for reprints of the full diagnostic guide should be addressed to the Michigan Heart Association, Doctor's Building, 3919 John R, Detroit 1, Michigan.

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Rheumatoid arthritis, rheumatic fever, intractable asthma, allergies . . .

Cortef* *tablets*

Supplied:

5 mg. tablets in bottles of 50
10 mg. tablets in bottles of 25, 100, 500
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*REGISTERED TRADEMARK FOR THE UPJOHN BRAND OF HYDROCORTISONE (COMPOUND F)

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Editorial Opinion

A LAYMAN'S ATTITUDE

The *Battle Creek Record and Lakeview News,* a weekly newspaper, every week publishes a guest editorial. On September 2, 1955, a citizen, Carl S. Gray, occupied most of two columns depicting the "excessive charges for hospital and medical services, claiming an illness is a calamity exhausting all the built-up reserves, coming on without warning so no one may prepare. He compared a week in the hospital with a week at the Waldorf-Astoria, and could see absolutely no justification for such high hospital charges.

We were tempted to reply, but heard that one of our hospital administrators was taking action. We met Mr. Gray on the street and remonstrated. We found he had been to the hospital, had been shown the whole works, but was unimpressed. We were pleased on September 16, 1955, to find an answer which we are happy to reproduce in part. We are grateful to the writer, and happy to know someone is appreciative enough to "take our part." We could not have done a better job.

EXCEPTION TAKEN TO GRAY'S HOSPITAL VIEWS

By a Local Business Woman

It was with a great deal of interest, a little amusement and considerable righteous anger that I read the Guest Editorial, relative to the high cost of hospitalization, by Carl S. Gray. His depiction of the modern hospital as a "yawning maw waiting to devour the savings" of the average American family, reminds one of some of the literary efforts which were found a decade or so ago, between the pages of a paper covered dime novel.

One can only wonder where Mr. Gray has been for the last fifteen or twenty years. Does he know that a pound of butter that used to cost 27 cents now sells for 65 cents or more? Bread used to be ten cents a loaf, and now is 23c and higher. The average five-room home that used to sell for $5,000 or $6,000 now is offered for sale as a steal at $16,500! In the midst of all these rising prices, does he think that the cost of medical care has stood absolutely still?

We are living in an age of fantastic scientific progress, where new wonder drugs and treatments are being developed at a terrific rate of speed. Our modern hospitals are constantly striving to keep up with this progress, offering the latest in medicines and machines, along with trained personnel to administer the treatment of their patients. All this, of course, costs money—and a lot of it.

Mr. Gray goes on to state that "unlike voluntarily indulged extravagances, no application of thrift or prudence may prevent the bolt from striking," meaning, of course the tragedy of sudden illness striking us or some member of our family. He seems to have the idea that life is just a bed of roses, and if you are a good little boy, and save your money, nothing will ever happen to take it away.

The comparison which was drawn between the bill for hospital care for one week and a stay at the Waldorf-Astoria for one week, it seems to me, is no comparison at all. In the first place, while the Waldorf may have rooms at $8 a day, they in all likelihood are cubby-holes, back of the elevator. In any event, the personnel required to operate and run a modern hospital, is entirely different from that required to staff a hotel. Immediately upon being admitted as a hospital patient, you are placed in the care of a highly trained technical team. This includes doctors, nurses, dietitians, medical and x-ray technicians, physiotherapists, and others, all of whom are specialists in their particular field, and who have become so as the result not only of college education and training, but in addition have spent a two-year or three-year internship working (in most cases for only board and room) in qualified hospitals, under experienced people in their respective fields. How can these hospital employes be compared to the large number of unskilled workers employed by any modern hotel?

As to the high cost of medicines and drugs, I can only suggest that a trip through the Upjohn Plant in Kalamazoo, or any other pharmaceutical house, for that matter, would in all probability answer most of Mr. Gray's questions, and at the same time relieve him of the idea that the hospital is "gouging" its patients by overcharging them for medicines which they buy at wholesale rates. The manufacture of medicines and drugs is a very complicated and expensive proposition, as I am sure he would learn from such a trip.

It seems to me that entirely too much criticism is being directed at both our doctors and our hospitals. The public, of course very seldom hears anything about the numerous cases treated, for which the doctor and the hospital receive no remuneration at all. How about Joe Doakes who gets himself all smashed up in an automobile accident and is rushed to a hospital in the ambulance? Do the hospital attendants first investigate his financial status, and his ability to pay the hospital bill? Of course not! Within minutes after arriving at the hospital, he is under emergency treatment. And how about the woman who arrives at the hospital in labor, not having seen a physician prior to her confinement? Do they turn her away, if she is unable to pay? Again, the answer is NO! How then, can any thinking person accuse our hospitals of being heartless, grasping institutions, interested only in extracting as much

(Continued on Page 42)

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for the majority of diabetics



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A LAYMAN'S ATTITUDE

(Continued from Page 40)

money as possible from patients? I can only suggest to Mr. Gray, that if he is truly seeking for the answer to his questions, he go directly to the hospital director or superintendent. I am sure they will be happy to enlighten him.

OLDER JOB HUNTERS GIVE INDUSTRY TWO CHOICES

By now, most people understand that it is the pension plan—either existing or prospective—which makes it so hard for older job hunters to land work.

Figures showing just how it comes out from the employer's standpoint have been published by the Labor Department. If a worker is to begin getting a $100-a-month pension when he is sixty-five, the annual premiums for various age groups are as follows:

For the worker hired at 30, $326; for one hired at 40, $508; at 50, $939; at 55, $1,486.

Management's reluctance to hire older people is understandable, even though surveys show the great majority of employers to consider the older man just as good and even better than the younger one when it comes to turning in a day's work.

Nevertheless, the pension plan is plainly here to stay, and equally clearly people have to live decently by some means until they are old enough for Social Security to provide an income.

Labor Secretary Mitchell recently stated the case for the future when he said:

"If economic life becomes too hard for them (the older people) they will form the most potent group this Nation has known and force some kind of a public program for their survival. This is a possibility industry must face immediately. Will it find places for older workers and make profits from their production, or be taxed much more heavily than now in order to sustain them as non-workers?"

Neither alternative can have much appeal for the employer, and understandably so. After all, businessmen do have to think of costs—and think about them harder the more intense competition becomes. Still, there are the choices, and there isn't any other.

Incidentally, when somebody tells you that the Eisenhower Administration is strictly for Big Business and hasn't any place in its heart for the ordinary fellow, don't forget this. The choice was laid down by a Cabinet officer of that Administration, and he was stating Administration position on the ordinary fellow who is getting up in years.

It seems to us to be a position wholly regardful of his plight, and forthrightly mandatory toward business.—*Detroit Free Press,* Sept. 14, 1955.

INTERNATIONAL CERTIFICATES OF VACCINATION

During 1954, 452,049 persons traveled outside the United States, not counting the thousands who daily cross the Canadian or Mexican borders. The International Certificates of Vaccination form that physicians are called on to complete whenever a person is vaccinated for international travel is an important document. A person can be quickly processed by quarantine officers here and abroad when his vaccination certificate contains complete information and is properly authenticated.

The vaccinating physician can help in this procedure by always using the International Certificates of Vacciation form to record complete immunization data and by instructing the prospective traveler to have the certificate authenticated by the local or state health officer. The health officer can speed the process by using his official stamp or seal to authenticate the certificate. If the health officer does not have either, the United States Public Health Service suggests that he have a stamp made that includes the term "health officer" and the name and address of the health department. The act of applying the stamp to the certificate is required by international agreement for the purpose of attesting to the fact that the immunizing physician is a practicing physician within the area, thus reducing the possibility of fraudulent certificates being issued. The certificate is not valid without this approved stamp, and without it the traveler may be exposed to delay or other difficulties.

The International Certificates of Vaccination form is given to prospective travelers with the passport application. If the person is traveling on a tourist card he may obtain a certificate from the local health department or purchase one from the Superintendent of Documents, Government Printing Office, Washington, D. C., for 5 cents. Most travel agencies and automobile clubs also have these certificates. The co-operation of all those concerned with the issuance of a valid certificate to the traveler will assist in helping the United States to maintain its present morbidity rate of zero for smallpox in spite of the disease being present in other areas of the world.—Editorial, *J.A.M.A.,* (Oct. 29) 1955.

Only accidentally is a really early ovarian cancer likely to be encountered.

* * *

There is no characteristic appearance of early cervical cancer.

* * *

Mistakes in diagnosis are most frequently made by assuming a lesion of the cervix to be inflammatory in nature without cautious examination and by casually passing over minor post-menopausal bleeding as senile vaginitis.

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

VOLUME 55 JANUARY, 1956 NUMBER 1

Prevention of Rheumatic Fever

By Leon De Vel, M.D.
Grand Rapids, Michigan

THE ARTIST who drew the front cover of the current Heart Number of The Journal of the Michigan State Medical Society dramatically depicts the breaking of a link in the chain of events that leads to rheumatic fever. Anti-streptococcic therapy is the agent that breaks the link in the chain.

It has been apparent for the past twenty or thirty years that the incidence of acute rheumatic fever and the mortality from rheumatic heart disease are steadily declining. It is also reported that the clinical picture of acute rheumatic fever—the acute inflammatory rheumatism of the older authors—appears to be changing: it is frequently less acute and less dramatic than it was a few years ago. Nevertheless, the disease is still with us and takes its yearly toll in morbidity, disability and mortality. It is now known that rheumatic fever and its recurrences can be prevented in a large measure.

Prevention requires an understanding of the etiological factors involved. In rheumatic fever, they are multiple, and the mechanism of their action and interaction is not well understood. They may be: climatological (with higher incidence in the latitudes with cold, damp winters); environmental (favored by conditions of crowding as in slums, camps or barracks); familial or hereditary (as shown by the high incidence of positive family histories and in Wilson's studies of heredity); immunological (particularly as regards response to infection with the hemolytic streptococcus); nutritional (deficiencies of protein and other food intake); and others. Rheumatic fever apparently does not develop until a combination of these factors is present, plus a streptococcal infection.

Numerous studies, beginning with those of Coburn and later based principally on the experiences of the Armed Services during World War II clearly indicate a sequential relationship between antecedent infection with Group A Beta Hemolytic Streptococcus and subsequent acute rheumatic fever. The evidence brought forth is epidemiological and immunological. The former is based on individual clinical observation and also on broader incidence studies (e.g. in the Armed Services) which can be typified in the expression: "A scarlet-fever year is also a rheumatic-fever year." The abnormal immunological response of rheumatic subjects has been demonstrated in the abnormal titers which develop in their sera to the several products of the streptococcus, particularly anti-streptolysin O, anti-hyaluronidase and anti-streptokinase. The sequence of events: streptococcic sore throat—latent period of two to four weeks—acute rheumatic fever, seems well established. The mechanism of this response which seems to be peculiar to susceptible individuals is still being studied.

If the relationship of streptococcic infection to rheumatic fever is accepted, then it follows that eradication of hemolytic streptococcal infection

The Rheumatic Fever control program of the Michigan State Medical Society is financed entirely by a Michigan Heart Association grant of funds.

Dr. De Vel is Medical Co-ordinator of the MSMS Rheumatic Fever Control Program.

will also mean prevention of rheumatic fever, either initially or as a recurrence. Penicillin provides a potent and effective means of achieving this objective.

1. For the prevention of the initial attack of rheumatic fever:

"When streptococcal infection is suspected, treatment should be started immediately. Penicillin is the drug of choice. Effective blood levels should be maintained for a period of ten days . . .

MEDICAL RECOMMENDATIONS FOR CARDIAC AND/OR RHEUMATIC CHILDREN IN SCHOOL

DIAGNOSIS:

() Congenital Heart Disease
() Rheumatic Heart Disease
() Rheumatic Fever
() Other forms of Heart Disease
() No Heart Disease

RECOMMENDATIONS:

(1) May attend all school activities without restriction ()
(2) Hame teaching for a periad af_____weeks
(3) Admission to special school ar room ()
(4) May attend schaal: All day () Half days ()
(5) Physical education:
Competitive Sports & Games ()
Exclude: Strenuaus exercises ()
Swimming (pool) ()
All Gym activities ()
(6) Playground activities:
Competitive Sparts & Games ()
Exclude: Strenuous Sports & Games ()
All Playgraund activities ()
(7) Rest Period: None ()
_____hour in the marning ()
_____hour in the afternaon ()
(8) May climb stairs slowly ()
Use of elevator preferred ()
(9) Transportation to and from school shauld be provided ()
(10) Should not walk home for lunch ()
(11) Other recommendations:
(12) These recammendations should be reviewed in_____months.

Date_____

Physician's signature

(This farm has been prepared jaintly by the Rheumatic Fever Control Committee M.S.M.S. and the Committee on Education af Exceptional Children of the Michigan Department of Public Instruction. It is hoped that its use will facilitate the management of cardiac and/or rheumatic children in school.)

The American Council on Rheumatic Fever of the American Heart Association makes the following recommendations (*Circulation,* February, 55):

even though the temperature returns to normal and the patient is asymptomatic."

A choice of three methods is offered:

1. Intramuscular benzathine penicillin G: one injection of 600,000 units for children, 600,000 to 900,000 units for adults.

2. Procaine penicillin with aluminum monostearate in oil: 3 injections 3 days apart: 300,000 units for children, 600,000 units for adults each.

3. Oral penicillin: 250,000 units t.i.d. for 10 days.

A broad spectrum antibiotic may be used when the patient is sensitive to penicillin. The diagnosis of streptococcal sore throat, even when acute, is not always easy. It is therefore advisable to obtain throat cultures at the onset of treatment. The promiscuous use of penicillin is not to be commended, but early and adequate penicillin therapy of streptococcal infections is of particular importance for individuals who have a positive family history of rheumatic fever, or for children who, for one reason or another, have been "suspects."

2. For the prevention of recurrences of rheumatic fever:

"All individuals who have a well-established history of a previous attack of rheumatic fever or chorea or who show definite evidence of rheumatic heart disease should be placed on continuous (year-round) prophylaxis."

A choice of three methods is offered:

1. Sulfadiazine (or other newer sulfonamide): 0.5 gm (1 tablet) once a day for children under 60 pounds; 1 gm (2 tablets) for others.

2. Penicillin orally: 200,000 to 250,000 units once a day before breakfast.

3. Benzathine penicillin G intramuscularly: 1,200,000 units once a month.

The sulfonamides are bacteriostatic, not bactericidal as is penicillin, but their prophylactic use compares favorably with penicillin. The drug is generally well tolerated in the small daily dosages recommended. Skin eruptions or leukopenia may appear, generally within the first 6 to 8 weeks of therapy and should be watched for. Sulfa prophylaxis should not be started until the streptococcus has been eliminated by the use of appropriate penicillin (or broad spectrum antibiotic) therapy.

With penicillin prophylaxis, serum-sickness-like reactions with fever and joint pains may be mistaken for a relapse of rheumatic fever. The monthly injection of benzathine penicillin G has some advantages over the other two methods in that it ensures that the patient is actually getting his medication and in that it requires a monthly visit to the doctor's office, thereby affording an opportunity for closer follow-up, an objective otherwise difficult to attain.

Before a patient is placed on a long-term prophylactic regime as outlined above, it is of course necessary to be reasonably certain of the diagnosis. Jones' criteria for the diagnosis of rheumatic fever (J.A.M.A., 1944) as recently modified (Modern Concepts of Cardiovascular Disease, A.H.A. Sept., 1955) are a useful guide. Briefly, the several manifestations of rheumatic fever are divided into "major" and "minor" categories. The "major" manifestations are: carditis, polyarthritis, chorea, subcutaneous nodules, and erythema marginatum. The "minor" manifestations: fever, arthralgia, prolonged P-R interval in the electrocardiogram, increased erythrocyte sedimentation rate, presence of C-reactive protein, evidence of preceding beta-hemolytic streptococcal infection (by history or with an elevated or rising ASO titer in the blood serum). A definitive diagnosis of rheumatic fever would require the presence of two "major" manifestations, or one "major" and two "minor." When these criteria cannot be met, it is advisable to defer a definitive diagnosis and to continue to observe the patient for further manifestations. An erroneous diagnosis of rheumatic fever can have grave psychological implications for the patient, and has the makings of a cardiac cripple without heart disease.

IS IT WORTH WHAT IT COSTS?

Here are some statistics on life-time earnings, classified by education, showing the money returns from higher education:

The average elementary school graduate in a lifetime will earn$116,000
The average graduate of high school in a lifetime will earn$165,000
The average graduate of a college in a lifetime will earn$268,000

A college education, on the average, costs $9000—compare it with the returns.

—*The Kiplinger Washington Letter,* December 24, 1955

Unusual Cases Resulting from the Differential Diagnosis of Asthma

By Homer A. Howes, M.D.
Detroit, Michigan

ONE of the more important and frequently difficult problems in clinical medicine is the differential diagnosis of asthma. The word "asthma" now is used to indicate a coughing, wheezing dyspnea which is usually paroxysmal and can be noted either as a symptom or as a definite sign. This respiratory dysfunction is caused by changes in the bronchial tree manifested by edema of the mucous membrane, increased mucus and bronchospasm. Usually the primary site of trouble is bronchial, but it is now known that very often the bronchi will react, so to speak, in the manner described above even though the primary pathology is not bronchial but, perhaps, cardiovascular. Most cases of asthma are, it is true, bronchial asthma on an allergic basis. For this reason allergists not infrequently run across cases of asthma which originally were considered allergic, but which eventually proved to be caused by other conditions. The following three case reports are presented to illustrate this diagnostic problem.

Case 1.—F. O., a forty-seven-year-old colored male factory worker was first seen April 19, 1952, after emergency admission to Harper Hospital at the request of his family physician because of severe asthma. Apparently, eight days earlier he had suddenly developed episodes of severe wheezing dyspnea which were diagnosed as due to bronchial asthma. However, in spite of the usual office and home symptomatic treatment he did not improve and it was felt that hospitalization was indicated.

Review of his past history revealed that he had pneumonia in childhood and gonorrhea at age eighteen. In 1938 he had on only one occasion and without any apparent reason an episode of gross hematuria. He consulted a physician but no definitive study was ever made. In 1942 he had for several weeks a severe disabling backache which then subsided spontaneously and completely. In 1948 he began to have severe recurrent headaches. In 1951 physical examination revealed an elevated blood pressure and an ophthalmologist whom he consulted shortly after diagnosed hypertensive retinopathy.

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Other than symptomatic treatment for his headaches his medical history was then uneventful until the present illness.

On examination after admission to the hospital he was in severe respiratory distress. He could breathe only in painful, rapid, short, laboring, panting gasps. He raised at frequent intervals scanty amounts of bright red bloody, foamy sputum. He appeared severely and acutely ill with marked sweating and cyanosis. The respirations were 44 per minute. The pulse rate was 128 but the temperature never went above 100.6° rectally. Examination of the chest revealed some impaired resonance and varying fine to coarse râles throughout. The blood pressure was 200/100. There was no evidence of peripheral edema.

The blood examination showed red blood cell count of 4,640,000, hemaglobin of 11.0 grams and a white blood cell count of 18,700 with 85 per cent neutrophils. The urinalysis showed specific gravity of 1.025, a four-plus albuminuria, negative sugar, and 15 to 25 white blood cells and 10 to 15 red blood cells per high power field. The nonprotein nitrogen was 50 mg. per cent. Blood Kahn test was negative. Sputum examination showed no acid fast bacilli. The electrocardiogram showed evidence for left ventricular hypertrophy and of myocardial changes. The chest x-ray showed extensive consolidation of both lungs and slight enlargement of the heart in the left (Fig. 1).

The patient's condition was, of course, critical. He was given oxygen and codeine and Demerol for pain. At first, Chloromycetin was started, later penicillin and streptomycin were maintained. He was digitalized and given intravenous aminophyllin. Small doses of Mercuhydrin were given on several occasions. After four days he showed definite clinical improvement and the chest x-rays also showed marked clearing. He never raised any significant amount of purulent sputum and never did he become definitely febrile. The nonprotein nitrogen on several occasions varied from 41 to 47. The four-plus albuminuria persisted though most of the cells in the sediment disappeared. After four weeks the chest was entirely clear and he felt relatively well. However, the blood pressure remained elevated.

Because of the hypertension and the evidence suggesting kidney disease, an intravenous pyelogram was done. This showed good excretion of the dye on the left but none on the right. Subsequent retrograde pyelograms showed a normal bladder and vesical neck. The left ureter was catheterized easily, and indigo carmine dye appeared on the left in four minutes and concentrated well. However, the right ureter was obstructed in its lower third and the catheter could not be passed beyond

this point. Also, no dye was seen coming from the right at any time during a fifteen-minute period (Fig. 2).

On May 27, 1952, a right nephrectomy was done. The operating note indicated a beginning blood pressure of 200/100. During the operation it fell to 140/80. It has remained normal ever since. The microscopic pathological examination of the kidney was reported as showing chronic diffuse nephritis with arteriosclerosis and sub-epithelial hemorrhage in the renal pelvis.

The patient has felt well ever since and has resumed a normal working life. He has no more headaches and his check-up urinalyses have been normal. He has continued to take maintenance digitalis and restricts the salt in his diet. Occasionally he develops slight evidence of congestive failure manifested by a few râles at the lung bases, and he takes, intermittently, ammonium chloride and a mercurial diuretic.

It was believed that the extensive consolidation in the lungs represented the condition termed "uremic pneumonitis" and was a manifestation of the hypertensive cardiovascular-renal syndrome. It is difficult to explain on the basis of the pathological findings the reason for the non-functioning right kidney. Yet, from a clinical standpoint, this abnormal unilateral renal finding certainly was the factor in the cause of the hypertension.

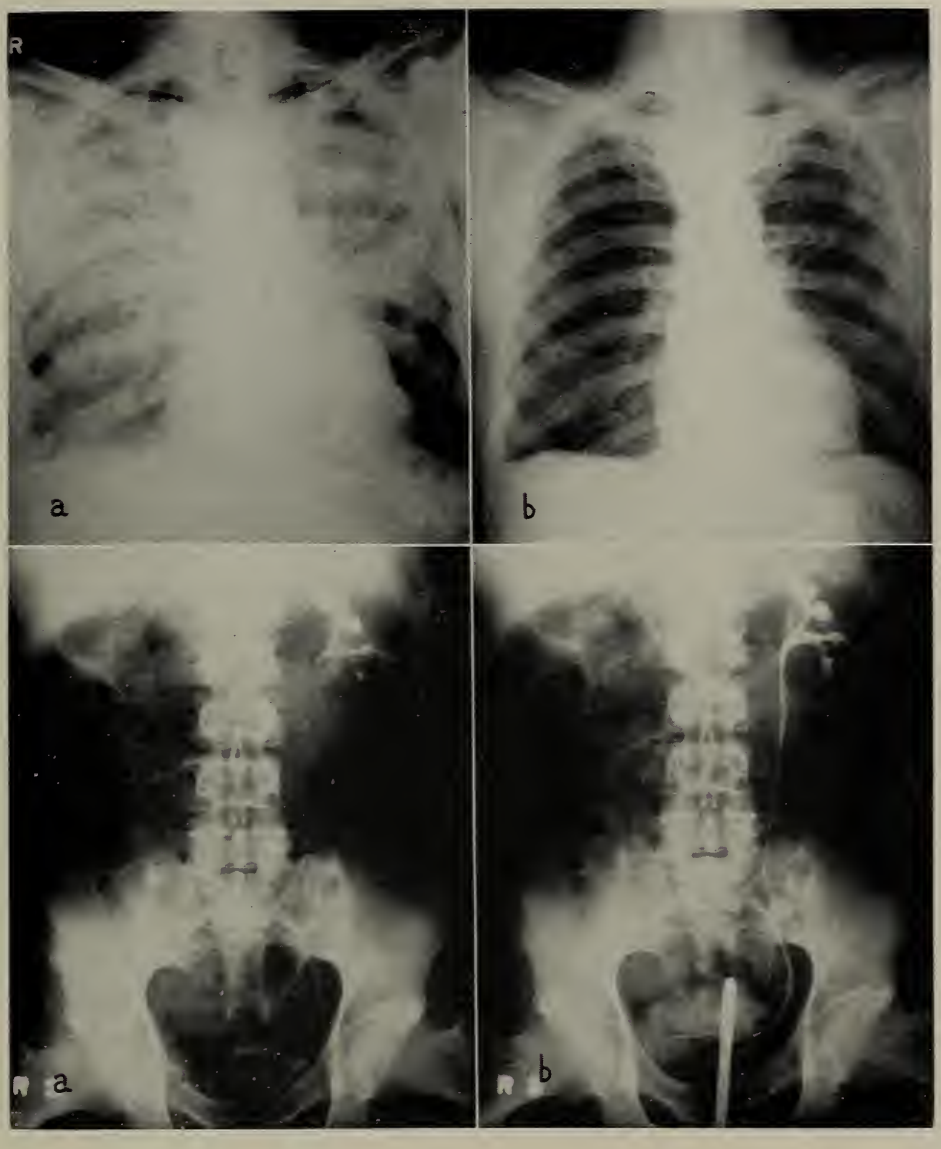


Fig. 1. (*above*) Case 1. (a) Admission chest x-ray showing extensive consolidation of both lungs. (b) Check-up chest x-ray showing almost complete clearing of previous consolidation. This film was taken two weeks after admission, but an interval x-ray had shown rapid clearing after only four days.

Fig. 2. (*below*) 1. (a) Intravenous pyelogram showing good excretion of the dye on the left but none on the right. (b) Retrograde pyelogram showing good delineation of the left kidney and ureter but inability to demonstrate the same on the right.

Case 2.—E. M., a sixty-four-year-old white factory worker was first seen in December, 1952, with a chief

complaint of asthma. He had had a bout of bronchitis six weeks previously and subsequently had developed episodic wheezing dyspnea. He was referred by his family physician for an allergic investigation.



Fig. 3. (*left*) Case 2. Chest x-ray showing the most marked changes observed during this patient's clinical course. There is evidence of marked pulmonary congestion and edema with bilateral pleural effusion and cardiac enlargement.

Fig. 4. (*right*) Case 3. Chest x-ray showing extensive changes involving both lungs consisting of diffuse fibrosis, cystic areas and emphysema.

Review of his past history gave no clue regarding any previous allergic condition except that he had for many years a perennially stuffy nose. He had had as long as he could remember an irregularity of his heart rate which, according to him, had never been explained. Apparently, though he had been able to do somewhat arduous work steadily before the present illness, he had not felt too well. The exact symptoms were difficult to determine. He seemed to perspire rather excessively, felt somewhat irritable, and had noted some tremor. Several years before he had consulted a physician who put him on one of the antithyroid drugs. He did not tolerate this and no further treatment was given. During his present illness, he had been given some ephedrine for his asthma, and he had an episode of severe incoordination for several hours. There had been no significant weight loss.

On examination he appeared to be chronically ill. His skin was warm and smooth. There was a fine tremor of the outstretched hands. His heart rate was 84 per minute and was totally irregular. The blood pressure was 180/100. The weight was 138 pounds. His heart was enlarged with the left border of cardiac dullness almost to the left anterior axilliary line. The chest was emphysematous and there were bilateral basilar râles. The liver edge was felt three finger breadths below the right costal margin and there was a one-plus ankle edema. The thyroid was thought by one examiner to be very slightly enlarged and nodular.

The routine laboratory examinations of the blood and urine were normal. The chest x-ray showed emphysema, an enlarged heart, and evidence of pulmonary congestion. The electrocardiogram showed a wandering pacemaker. An electroencephalogram was within normal range. A radioactive iodine tracer study of the thyroid revealed a mixed gland function with foci characteristic of toxic adenomata.

He was treated with a salt poor diet, digitalis, ammonium chloride and mercurial diuretics. Radioactive iodine (I^{131}) was given as treatment. He received 6 millicuries on January 30, 1953, and again March 2, 1953.

For a period of about four months he did not do too well. The congestive cardiac failure was hard to control and on one occasion became quite marked (Fig. 3). However, following the second dose of radioactive iodine he showed relatively rapid improvement and soon felt well. Since April 27, 1953, when he returned to full-time work, he has carried on very well with maintenance digitalis, salt restrictions, and occasional diuresis. His weight has remained at 140 pounds.

The signs and symptoms so far as thyroid function was concerned were mixed. Many indicated some hyperthyroidism and this opinion was borne out more precisely by the radioactive iodine tracer study. The subsequent clinical course clearly showed that there was a great factor of thyrogenic heart disease, for it was only after adequate dosage of I^{131} had been given that the heart failure was controlled and general improvement noted. It is possible that the emphysema in this case contributed to the original complaint of wheezing. However, this effect probably was minimal for with the control of the heart disease he has had no more wheezing and his vital capacity has been 4,300 cc., which is within normal limits for his height.

Case 3.—C. H., aged fifteen, a white school girl, was first seen in January, 1954, for allergic examination because of asthma. Apparently, from birth, she had had recurrent chest symptoms consisting of coughing and wheezing. There had also been frequent febrile episodes. A considerable amount of treatment had been given over

the years and, in retrospect, it was felt that the most helpful of all had been the use of penicillin by aerosol. Chest x-rays were reported as showing fibrosis. On one occasion a more special examination was done because it was suspected she might have sarcoidosis. In general, she was usually better in summer and worse in winter. She had always had a stuffy nose with considerable sneezing. Both her father and sister have hay fever. Further analysis of her history revealed that also from birth she had had recurrent gastrointestinal symptoms consisting of gaseous indigestion, frequent soft stools, occasional episodes of vomiting, and periods of extreme hunger alternating with anorexia.

On examination she was a thin underdeveloped girl, appearing chronically ill. There was clubbing of the fingers and cyanosis of the nail beds. The chest appeared emphysematous with an increased anterior-posterior diameter and diminished excursion. Coarse inspiratory râles were heard throughout, especially in the upper lung fields.

The routine laboratory studies of the blood and urine were normal except for a moderate leukocytosis. Special studies of material obtained by duodenal drainage with the tube put in place under flouroscopic control revealed the complete absence of amylase, trypsin, and lipase. Sputum specimens were scanty and grossly purulent, and were negative for acid fast bacilli. Pyogenic cultures grew out a hemolytic streptococcus, streptococcus viridans and staphlococcus albus. All of these were highly sensitive to Aureomycin, Chloromycetin, and Terramycin. An electrocardiogram was normal except for evidence of right axis deviation. The chest x-rays showed extensive changes involving both lungs consisting of diffuse fibrosis with cystic or pseudo-cystic areas and compensatory peripheral emphysema (Fig. 4). Barium examination of the gastrointestinal tract showed changes in the second part of the duodenum, probably due to the character of the secretions and the colon showed considerable stasis.

The evidence indicated that this patient has the somewhat unusual condition of mucoviscoidosis. The fact that she had survived her childhood and had lived to be in her teens makes her case even more unusual. She has been taking pancreatic extract by mouth and has used at regular intervals Terramycin by aerosol. She leads a relatively normal life, goes to high school and is an all-A student.

As time goes on, she believes she is more short of breath. Her vital capacity has remained at 1,400 cc., her weight has stayed at 75 pounds. More recently, another sputum culture grew out neiserria catarrhlis, staphlococcus aureus, and diplococcus pneumoniae, all of which were sensitive to Aureomycin, Terramycin, tetracycline, erythromycin, and Chloromycetin. It has been found necessary to give antibiotics systemically at intervals to control the recurrent febrile episodes. The prognosis in this case is, of course, very poor. As time goes on she very likely will develop definite clinical pulmonary heart disease and more widespread pulmonary infection. Her case is an example of the benefit which can be obtained by aerosol therapy for chronic nonspecific purulent broncho-pulmonary conditions. It also demonstrates the need for using various available antibiotics as they are needed.

Summary

In spite of the fact that each one of these cases had been referred for allergic examination because of asthma, in no instance was any factor of hypersensitivity relevant. Instead, each one presented an unusual and complicated clinical problem: a case of thyrogenic heart disease, another of hypertension controlled by removal of a clinically non-functioning kidney, and the third case one of mucoviscoidosis, an uncommon congenital condition. They further illustrate how important it is to ascertain exactly the cause for each case of asthma.

Osteogenic sarcoma is the most frequently encountered primary malignant tumor of bone.

* * *

Surgical resection of benign exostoses is not indicated as a cancer-preventing measure because malignant transformation in such instances is uncommon.

* * *

Pathologic fracture is frequent in osteolytic sarcoma, although unusual in the other types.

* * *

The diagnosis of all types of osteogenic sarcomas requires highly skilled, experienced x-ray interpretation first of all. Then, biopsy and frozen section should be done, followed by high amputation if the diagnosis is confirmed.

The clinical course of a patient with multiple myeloma is characteristically one of gradual decline.

* * *

Bence-Jones protein is present in random samples in about 50 per cent of cases of multiple myeloma.

* * *

The diagnosis of multiple myeloma can be confirmed readily by bone marrow aspiration from the sternum or biopsy of one of the skeletal lesions.

* * *

Treatment of multiple myeloma is generally unsatisfactory.

* * *

The majority of giant cell tumors develop in the lower end of the femur, the upper end of the tibia, and the lower end of the radius in that order of frequency.

Physical Medicine and Rehabilitation: A Medical Care Specialty

II. Its Vital Role in the Preservation of Private Practice

By Kathryn McMorrow, M.D., M.P.H.
Detroit, Michigan

DURING World War II, American physicians in service came into contact with British doctors of physical medicine whose management of a casualty was such as to return a man to duty in the shortest time possible. These techniques and the use of certain types of specially trained individuals shortly were introduced into circumscribed areas of the American Medical Services, particularly in the Air Force. A few of these physicians had the acumen to recognize a mechanism in the therapeutic procedure which would and could be adopted into civilian practice. They undertook to bring such knowledge and experience to the American Medical Association through a specialty which they wanted to call "Medical Rehabilitation."

The AMA Council on Medical Education and Hospitals had already agreed to a specialty "Physical Medicine" which was trying to function in precisely this area where the use objectively of skilled technicians and techniques hastened patient recovery from illness and lessened more rapidly disability and lost time due to disability. Therefore the AMA invited the two groups to join together in a common purpose and gave to the American Board of Physical Medicine its additional responsibility inherent in the term rehabilitation. This occurred in 1948.

In the normal pace of human events there would have been little need for the forced growth of the specialty; however, third party payment came into prominence precisely at that time. In addition, there was a rapid expansion of hospital facilities due to passage of the Hill-Burton Act. Moreover, the term rehabilitation came to have universal and magic appeal to everyone except those earnest physicians engaged in mastering the natural history of long-term illness and devising methods to (1) hasten its arrest and (2) mute and modify its ravages through a total approach to management including the physical, mental, emotional, social and vocational aspects. This group of physicians, by and large, is representative of the specialty known as Physical Medicine and Rehabilitation.

Just as Internal Medicine split off from General Practice, so also have many specialties split off from Internal Medicine including Physical Medicine and Rehabilitation. None of us practicing this most recent specialty is the least bit impressed by the magic read into the term rehabilitation. We are quite aware that the rehabilitation craze is but a transition in the development of a more realistic and happy marriage of the medical arts and sciences with the social arts and sciences which is necessary for the care of increasing numbers of patients with long-term illness. Each of us is concerned that our vocation simultaneously has become the avocation of physicians and lay people alike who rally round the term rehabilitation on a highly emotional basis.

As a result of this emotionalism, we have witnessed the growth of rehabilitation "centers" built with philanthropic and assurance funds with no planning or consideration on the part of the interested parties regarding medical practice. Our original purpose in our establishment of rehabilitation "centers" in certain areas was to demonstrate the need of such services in hospitals. We have hastened to cover the breach wherever possible in those areas where thought and planning regarding medical practice have been ignored. Many of us, as often as possible, have become administrators of such centers on a salary basis in an attempt to bring order out of chaos. We feel duty-bound to prevent the inroads of high-minded idealists from the field of social service and community organization into medical care.

Unfortunately, at the same time we have also had to make our way against members of our own profession who have been bitten by the rehabilitation "bug." Then, too, a large segment of our own profession has unrealistically denied to themselves

Part I, Its Background, Scope and Philosophy, appeared in the December, 1955, issue, page 1426.

the problems created for all of us by third party payment, the growth of the hospital as a business and arbiter of medical practice, and the increasing numbers of persons with long-term illness desiring medical care. This type of thinking has permitted a highly trained (but small in number and young in years) group of doctors of medicine to be ignored. Yet these are the segment of the profession who have chosen as a lifetime vocation a medical specialty dealing with these problems and their ramifications.

Unwillingness on the part of a large segment of the general profession to face the economic threat of the hospital business already has caused many promising radiologists, anesthesiologists and pathologists along with the physiatrist to become identified with a facility rather than the profession. We either have become an employe of the hospital or have compromised by working out a percentage arrangement with the hospital, or as has occurred in the Far West, we have through a process of education owned and operated our department in hospitals just as we own and operate our offices, taking in associates as rapidly as is feasible.

It is important to draw an analogy here. No surgeon would ever agree that because he is provided with an operating room and team that his services are to be obtained on a percentage or salary basis. However, many surgeons already are a party to this irrational thinking in that it is increasingly common for him to return a percentage of his emergency medical coverage to the hospital. Is this fee splitting? Yes, if the hospital is licensed to practice medicine. But the hospital is not licensed to practice medicine (St. Vincents, New York City).

The answer to this disconcerting state of affairs lies in the fact that the hospital administrator too often is allowed to equate medical practice with business administration. He takes the absolutely mercenary view that he is protecting "his" business. He forgets that it is not "his" business but the business of the people who want good facilities for their physicians when they have need of professional skills and services.

In addition, in searching for apparent sources of revenue which actually do not belong to the hospital but to the physician, the hospital administrator often overlooks his own most useful tool for honest and efficient administration, the cost accountant. It is our duty as a professional group to insist on honest cost accounting methods in order to give the American people a sound actuarial experience on which to base their premium for protection against illness. A deficit in the dietary department should not be hidden by an inflated charge to radiology for central administration or whatever other account may be used to serve the purpose. Inefficiency in management can thus be hidden from view. Compounding of such errors eventually hits the insurance company, and increased premiums are then the lot of the public. Fewer take out complete medical coverage and more patients who have long-term illness are discriminated against in favor of hospital and surgical care.

It is high time that we as a profession forego a traditional reluctance in reviewing finances and study the burgeoning effect of hospital management and voluntary agencies on the American people who are attempting to underwrite the cost of their own medical care, who at the same time are taxed to pay for facilities for their care and who are asked to give to community organizations purportedly also rendering medical care. This whole problem needs to be brought out into the open and discussed objectively by the profession rather than resorting, as we all do, to the hopelessly inadequate, often heated cloakroom discussions which end up invariably in the ostrich attitude: If we do nothing, everything will be all right. We are faced with a new situation and a complex one. The old answers will never do.

The physiatrist wants to help because he has developed with and in reaction against the complex social changes resulting from insurance for illness and the tremendous growth of hospitals and social agencies. He cannot help if the general profession continues to equate him with the term "physiotherapy" rather than with the term "rehabilitation," a mechanism in the therapeutic process. There is a tremendous task to face up to; and those of us who expect still to be practicing thirty years hence want and need the help of our peers who also are our seniors in years and experience to solve this most vicious threat against private practice and the physician-patient relationship.



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The McIntyre-Saranac Conference on Occupational Chest Diseases

By John E. Summers, M.D.
Grand Rapids, Michigan

THE McIntyre-Saranac Conference on occupational chest diseases was held February 6, 7 and 8, 1955, at Saranac Lake, New York. This was the eighth Saranac conference and the first combined McIntyre-Saranac Conference.

The McIntyre Research Foundation of Canada was founded by the McIntyre gold mining interests to combat the problem of silicosis so prevalent among the gold miners. The Saranac Laboratory is the remaining part of the famous Trudeau Sanatorium. The hospital part of the Trudeau Sanatorium was officially closed December 1, 1954.

Saranac Lake is a town in the Adirondack Mountains of northern New York with a population of 7,000. This area has been made famous by the late Doctor Edward Livingston Trudeau and his sanatorium. It is also famous for its recreational facilities.

The conference meetings were held in the town hall. As this building was not fireproof and as it had burned once before, smoking was barred during the lectures.

The conference was opened by Carey P. McCord, M.D., acting conference chairman, from the University of Michigan. Dr. McCord asked for "newness" and stressed the desirability of the speakers keeping within their allotted times. He had a large assortment of instruments, i.e., gavel, alarm clock, flashlight, buzzer and others, which he threatened to use if a speaker ran over his scheduled time. Dr. McCord expressed deep regret that the scheduled conference chairman, Anthony J. Lanza, M.D., of New York City, could not be present.

Francis B. Trudeau, M.D., son of Doctor Edward Livingston Trudeau, the founder of the Trudeau Sanatorium, welcomed the members of the conference. He said that this was the eighth and largest symposium to be held at Saranac Lake and the first to be held in conjunction with the McIntyre group of Canada. Dr. Trudeau related an incident: when he was a boy, the family was visiting in New York City. His father received a telegram stating that their house had burned to the ground. Shortly thereafter, he received another telegram from a wealthy former patient which instructed him to rebuild and send him the bill. This was the beginning of the Saranac Laboratory.

Mr. E. D. Fox, president of the McIntyre Research Foundation of Toronto, Ontario, spoke on the "Contribution of the Saranac Laboratory to Research on Chest Diseases." He sketched the various sources of financial support of the Saranac Laboratory; private endowments, gifts from individuals and industry and income from services rendered.

Mr. Angus D. Campbell, manager of the McIntyre Research Foundation, gave the "Annual Report of the McIntyre Research Foundation." Mining and other companies in four different countries continue the prophylactic use of aluminum. Over 10,000 miners in Quebec alone have had daily pre-work aluminum therapy for the past ten years. In northern Michigan, the new White Pine Copper Company is licensed to use aluminum therapy. The incidence of tuberculosis in the Timmons Gold Mine of the Porcupine area of Canada has been dropping since the institution of aluminum therapy. The workers of the McIntyre group of the Banting Institute and of the Saranac Laboratory found that aluminum prevented the toxic effects of silica in the lungs. Since the institution of prophylactic aluminum therapy in the McIntyre gold mines in 1933, there has been a drastic reduction in the incidence of silicosis and tuberculosis in those miners. The average age of death of the McIntyre gold mine worker is now sixty-two years. To be licensed for prophylactic aluminum therapy by the McIntyre Foundation, a company must have adequate dust control and a medical program including interval chest x-rays of the workers. The McIntyre Foundation is dedicated to preventing silicosis by various methods including the use of aluminum prophylactically until

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engineering methods are developed which can remove all silica from the air of the working places.

G. W. H. Schepers, M.D., D.Sc., director of the Saranac Laboratory, spoke on "Observations on the Comparative Vascular Pathology of the Occupational Diseases." Dr. Schepers is the new director of the Saranac Laboratory. He comes from South Africa where he worked for over ten years with the problem of silicosis in the South African gold fields. He stated that at one time, more than 75 per cent of the South African gold miners died from silicosis and silicotuberculosis. In South Africa at the present time, the life expectancy of the average gold miner is twenty years less than the life expectancy of the general population, this in spite of the rigid method for selecting mine employes. Only about 30 per cent of the applicants for jobs in the gold mines are accepted. The most common cause of death of these miners is cor pulmonale, not tuberculosis. What causes this cor pulmonale to develop? Dr. Schepers advanced the proposition that cor pulmonale develops in the victims of various toxic dust diseases due to damage to the blood vessels of the lungs. Many slides were shown of lung tissue removed from the lungs of victims of silica, asbestos, beryllium, diatomaceous earth, talc and coal dust. These slides illustrated remarkably well the great damage to the pulmonary blood vessels by perivascular fibrosis, by destruction of the elastic layer of the arteries and by intraluminal thickening. This very fascinating theory caused considerable discussion.



Fig. 1. Francis B. Trudeau, M.D., son of Dr. Edward Livingston Trudeau, the founder of the Trudeau Sanatorium, welcoming the members of the eighth Saranac Conference on Occupational Health Disease.



Fig. 2. Speaking is G. W. H. Schepers, M.D., D.Sc., director of the Saranac Laboratory, Saranac Lake, New York. Doctor Schepers, after some ten years of experience with silicosis in the South African Gold Fields, recently accepted the directorship of the Saranac Laboratory. Seated is the Acting Conference Chairman, Cary P. McCord, M.D., consultant in industrial medicine of the Institute of Industrial Health, University of Michigan, Ann Arbor, Michigan.

H. S. Van Ordstrand, M.D., of the Cleveland Clinic, reported on "The Value of Lung Biopsy in the Diagnosis of Occupational Pulmonary Diseases." Sixty-six patients had had a piece of lung tissue resected through an anterior intercostal incision. Twenty-six of these patients had a lung disease which could have been of occupational origin; however, only eleven proved to be of occupational origin. He reported that seventeen of these sixty-six patients had the Hamman-Rich syndrome revealed by the lung biopsy. From this one must assume that the Hamman-Rich syndrome is a very common disease. The Hamman-Rich syndrome is also known as acute, diffuse, interstitial fibrosis of the lungs, diffuse fibrosing interstitial pneumonitis, cirrhosis of the lung, and idiopathic pulmonary fibrosis. It is an acute or chronic pulmonary fibrosis of unknown etiology characterized clinically by cough, dyspnea and cyanosis in association with minimal physical findings and a progressive afebrile course. The use of cortisone is dangerous. Besides the Hamman-Rich syndrome, other diseases revealed by the lung biopsy included siderosis, silicosis, lupus erythema-

tosis, asbestosis, berylliosis (the patch test for berylliosis is a valuable diagnostic test) sarcoid, metastatic adenocarcinoma, periarteritis nodosum and pulmonary adenomatosis. This concluded the Monday morning session.

Morris Dworski, M.P.H., of the Saranac Laboratory, opened the Monday afternoon program with a paper entitled "Studies in the Prophylaxis of Experimental Silicosis by Means of Aluminum." The late Dr. Leroy U. Gardner, a former director of the Saranac Laboratory, had worked on this problem during the last eight years of his life. Colloidal aluminum hydroxide exerts its beneficial action by preventing the fibrosis of silicosis by neutralization of the surface charge of the silica particle or by coating the silica particle. Silica particles mixed with colloidal aluminum hydroxide when injected into the guinea pig produces only phagocytosis; the usual silicotic reaction in the tissue does not occur. With experiments of one year's duration silicosis has been prevented in the guinea pig by the use of aluminum. However, with excessive dosages of aluminum powder, guinea pigs infected with an attenuated strain of tubercle bacillus, which ordinarily is not progressive in the guinea pig, develop a progressive tuberculosis.

Dudley A. Irwin, M.D., medical director of the Aluminum Company of America, presented an interesting paper on "The Demonstration of Aluminum in Animal Tissues." This was followed by L. M. D. Osmond, M.D., of the Mesta Machine Company reporting on "Experiences with the Control of Silicosis in Foundries." A clinical and chest x-ray survey of the workers in the Mesta Machine Company of Homestead, Pennsylvania, was begun in 1936. It was found that the cooling of sand gives rise to crystobolite, a more toxic form of silica. Due to the huge size of the castings, it was found to be impossible to secure proper dust control by ordinary ventilation methods. The incidence of silicosis continued to rise. The incidence of silicosis was highest among the chippers and next among the molders. In 1947, prophylactic aluminum therapy was instituted. He believes that this has helped in preventing silicosis. It is noted that twenty-seven new cases of silicosis developed between 1949 and 1953, although it was said that fourteen of these appeared in 1949. They are satisfied with prophylactic aluminum therapy and have had no bad effects from it.

Mr. J. K. Godin, manager of the Belleterre, Quebec Mines Limited, reported on "Some Experiences with Silicosis Control in Gold Mining." In Quebec, there are sixteen gold producing mines. Twelve of these mines use prophylatic aluminum therapy. Mr. D. L. Perry from the Universal Rundle Corporation reported on "Experiences With the Control of Silicosis in the Ceramic Industry." Silicosis presents a problem in such industries where bathroom fixtures are made. The mixing job, which is hand work, presents the greatest hazard. In the casting department also the silicotic hazard is great. This plant has a paternalistic labor policy. Over forty-two men with advanced silicosis are still employed. Aluminum is inhaled for five minutes once or twice each week. No new case of silicosis has been reported since aluminum therapy was instituted.

The discussion of these papers was led by Paul G. Bovard, M.D., roentgenologist from Tarentun, Pennsylvania. In this discussion, it was brought out that when the silica content of the air was over 50 per cent, the dust count must be kept below 5,000,000 particles per cubic foot to prevent silicosis; when the silica content is 5 to 50 per cent, the dust count must be below 20,000,000 and when the silica content is 5 per cent or less, the dust count must be kept below 50,000,000 particles per cubic foot to prevent silicosis. This ended the first day's program.

The second day of the conference, Tuesday, February 8, began with G. W. H. Schepers, M.D., D.Sc., director of the Saranac Laboratory, reporting on "A Review of Progress in the Conquest of Occupational Chest Disease in South Africa." Dr. Schepers outlined several phases in the development of occupational lung disease in South Africa. The first phase from 1890 to 1905 was characterized by total ignorance. Large numbers of miners died, the cause not being realized. The second phase, 1905 to 1914, was characterized by the investigations of various commissions and the establishment of the Silicotic Bureau in 1914. This Bureau accomplished the following:

1. Standardized all procedures and compensation.
2. Eliminated partisan groups.
3. Eliminated lawyers.
4. Encouraged research on occupational lung disease.

Rigid control of the miners was instituted. First, tuberculosis was eliminated. Next, rigid selection of applicants was begun. Chest x-rays of each miner every six months is required. These rules apply only for the 50,000 white miners and

not for the 350,000 black miners. Dr. Schepers observed that silicosis is a tremendous problem among these miners of South Africa. More than 1,500 new white cases of silicosis were reported in 1953.

Mr. H. N. Doyle of the U. S. Public Health Service spoke on "Accomplishments in the Epidemiologic Study of Silicosis in the United States." The first investigation of the U. S. Public Health Service of the problem of dust diseases of the lungs was of the miners of Oklahoma, Kansas and Missouri in 1914. Sixty per cent of the miners examined were diagnosed as having miners' consumption. Subsequent investigations into the cement, asbestos, coal, talc and granite industries were made. One of the most important studies correlating lung pathology and dust exposure was made in the granite industry in 1923. It was found that the development of dust disease of the lungs depended upon:

1. The composition of the inhaled air.
2. The concentration of the toxic dust particles in the air.
3. The size of the dust particles.
4. The duration of exposure of the worker to the dust.
5. Individual susceptibility of the workers.

There has been no appreciable decline in the number of deaths from silicosis and anthracosilicosis in recent years; 1,201 such deaths being reported in 1952. Workers in foundries and in diatomaceous earth are exposed to silica and other toxic dusts. Silicosis is still a major industrial disease problem in the United States. Many plants still do not have a dust control program. A survey in 1936-1939 led to an estimate of 1,500,000 workers who are exposed to toxic dusts. Statistics are very poor and there is a great need for statistics in this field.

Mr. N. F. Parkinson, executive director of the Ontario Mining Association, read a paper on "Silicosis in Canada." Silicosis means a fibrotic condition of the lungs sufficient to produce a lessening capacity for work caused by the inhalation of silica dust. Ontario produces 34.6 per cent of the gold mined in Canada; Quebec 19 per cent; Alberta 18 per cent and British Columbia 12 per cent. In the Ontario mines, they have had 1,146 cases of silicosis since mining activities began in 1926. Six hundred and twenty-three of these silicotic workers are dead. These mines now have a dust control program, a medical program and use aluminum prophylactically.

A. R. Riddell, M.B., D.P.H., of the Silicosis Referee Board of Ontario, collaborating with Mr. Parkinson in the paper, "Silicosis in Canada" listed other industries other than mining presenting a dust hazard: foundries, granite, silica brick, pottery, ceramic and abrasive powder. The known instances of silicosis as of 1954 are:

Industry	Number of Silicotics	Number of Silicotics Still Working
Foundries	426	298
Granite	37	20
Porcelain, et cetera	58	53
Silica brick	31	18
Miscellaneous	26	20

This ended the Tuesday, February 8, morning session.

The afternoon meeting was led off by M. Kleinfeld, M.D., of the Division of Industrial Hygiene of the State of New York, speaking on "Talc Pneumoconiosis." Talc does cause fibrosis of the lung. Workers in talc mills and talc mines are exposed to this dust hazard. The basic chest x-ray picture in talc pneumoconiosis is one of interstitial fibrosis in the lower lung field. Massive deposits called "talc placques" are sometimes seen over the pericardium and over the diaphragm. Decreased plumonary efficiency results. Cor pulmonale may develop. With extensive disease, clubbing of the fingers occurs. Slides from the lungs of talc pneumoconiosis victims were shown showing peribronchial and perivascular fibrosis. The fibrous tissue appears in sheets and in nodules.

Geoffrey E. French, M.D., formerly senior assistant medical officer in the Kolar Gold Field of South India, spoke on "Pneumoconiosis on the Kolar Gold Field, South India." Autopsy is required by law of each miner who dies wherein the relatives seek compensation. Dr. French said that there is a lower incidence of disabling silicosis in the Kolar Gold Fields than one would expect because the presence of aluminum oxide in the ore apparently has a detoxifying action on the silica particles.

A. I. G. McLaughlin, M.D., H.M., medical inspector of factories of London, England, was delayed two days on his boat trip from England, arriving only a few minutes before he was scheduled to speak on "The Dust Diseases in Great Britain." He listed a large number of industries in which dust hazard can lead to

pneumoconiosis. The number of deaths from pneumoconiosis among coal miners has been increasing since 1942. Dr. McLaughlin said even very small amounts of silica in the inhaled air causes fibrosis of the lungs. This mixed dust pneumoconiosis shows a stellate type of fibrosis in the lungs rather than the nodular silicotic nodule. New instances of pneumoconiosis in England in 1953 are listed according to the industry involved (exclusive of miners):

PNEUMOCONIOSIS IN 1953

Industry	New Cases
Refractories	15
Stone workers	57
Pottery	254
Slate	62
Foundries	155
Metal grinding	5
Sand blasting	7
Furnace dismantling	17
Abrasive field manufacturing	3
Asbestos	15
Boiler scaling	4

Of special interest is the observation that autopsies of nine boiler scalers revealed not only the stellate scar tissue of the pneumoconiosis type in the lungs but five of these individuals also had cancer of the lung. Talc pneumoconiosis is also a definite entity. When pneumoconiosis is diagnosed in a worker in England the per cent of disability resulting from it is determined by the pneumoconiosis board. The worker collects his partial disability compensation and continues working unless he is shown to have tuberculosis. When the relatives of a deceased person seek compensation with a claim of pneumoconiosis, an autopsy of the alleged pneumoconiosis victim is required by law. The incidence of pneumoconiosis in England is increasing.

Discussion of the morning papers was initiated by Philip Drinker, ScD., professor of industrial hygiene of Harvard University. Generally speaking, all discussions were markedly restricted due to lack of time. Roy Albert, M.D., assistant chief, medical branch of the U. S. Atomic Energy Commission, led off the Tuesday, February 8, afternoon session by reading a paper on "The Clearance of Radioactive Dust from the Human Lung." The toxicity of radioactive dust was originally observed in the European uranium mines; the problem also exists in the atomic industry. Eight human subjects were used in this experiment. Rapid clearing of the larger particles from the tracheo-bronchial tree by the action of cilia occurred within two hours after introduction. Much of this radioactive material removed from the lungs by the cilia was swallowed and detected in the stomach.

Stanislaw Kaszar, M.E., E.E., of the Saranac Laboratory, gave a talk on "Statistical Studies on Experimental Aerosols." This was followed by a report on "A Correlation of Tissue Reaction and the Mineral Content of the Lungs of Experimental Animals" by Philip C. Pratt, M.D., of the Saranac Laboratory. Very interesting experiments with guinea pigs were reported showing the increased weight of the lungs following the inhalation of various dusts. The actual weight of the dust in the lung was subtracted from the total ash in order to determine the actual increase in cellular reaction in the lung. In those guinea pigs who inhaled free crystalline silica dust, there was a marked increase in the weight of the lungs. In those guinea pigs who inhaled amorphous free silica dust, there was some increase in the weight of the lungs but not as marked as in those inhaling crystalline free silica. In those guinea pigs who inhaled only amorphous silicate dust, the lungs showed practically no increase in weight. When guinea pigs were allowed to inhale submicroscopic amorphous free silica there was a marked increase in weight of the lungs while the total weight of the silica in the lungs was very small. These experiments demonstrated the marked fibrogenic properties of submicroscopic silica and of free crystalline silica in the lungs of the guinea pig.

Anna M. Baetjer, D.Sc., from Johns Hopkins University, spoke on "The Reaction of Chromium Compounds with Body Tissues and their Constituents." Men employed in the chromate manufacturing industries have cancers of the lung 25 to 40 times the expected rate. Only bronchogenic cancers are induced. These bronchogenic cancers occur only in the chromate chemical manufacturing industry. The chrome iron ore is not carcinogenic. From several lines of investigation no conclusion as to why chromium causes cancer of the lung could be reached.

W. R. Franks, M.D., from the Banting and Best Institute, reported on "The Question of Differential Experimental Susceptibility of Animals to Dust." It was suggested that the damage from toxic dusts might be primarily periarteriolar rather than alveolar. The reaction of the lungs of man, mice, guinea pigs and monkeys to the toxic dusts appears to be similar.

Lester D. Scheel, Ph.D., and G. W. H. Schepers,

M.D., D.Sc., of the Saranac Laboratory, presented "Biochemical and Biological Aspects of the Surface Properties of Particulate Quartz." Soluble silica plays no part whatsoever in the toxicity of silica. The toxic effect of silica is due to some surface phenomena of the silica particle. Experiments are shown which have indicated that the silica particle has a high negative charge on its surface. Neutralization of this charge can be accomplished by certain proteins and by aluminum hydroxide.

This concluded the Tuesday, February 8, afternoon session. A banquet was given in the evening where Paul S. Richards, M.D., of Salt Lake City, gave a talk praising the fine qualities of Leroy U. Gardner, M.D., the late director of Saranac Laboratories. Hugh M. Kinghorn, M.D., of Saranac Lake, presented "Historical Sketches on Dr. Edward L. Trudeau and Dr. E. R. Baldwin." The final day of the conference, Wednesday, February 9, opened with Theodore C. Waters, industrial counsel from Baltimore, speaking on "Legal Aspects of the Evaluation of Disability in Compensation for Pneumoconiosis." He said that so far the only thing that he had gotton out of the meeting was "confusion." "Does the medical profession give its approval to prophylactic aluminum therapy or not?" Later on, he put this question again to Dr. Schepers, who replied that he believed that aluminum therapy was helpful in preventing silicosis. Counsellor Waters said that the legal question of pulmonary dust disease in the United States was complicated by each of the forty-eight states having somewhat different laws. He added, however, that he was opposed to the federal legislation, under consideration at the present time, proposing federal control of the dust hazard. In fifteen states partial disability is not compensable.

G. W. H. Schepers, M.D., D.Sc., director of the Saranac Laboratory, spoke on "The pulmonary Disability Legislation of South Africa." Next, Giles F. Filley, M.D., of the Saranac Physiology Laboratory, reported on "Criteria for the Assessment of Disability in Occupational Chest Disease." When industrial workers with alleged pulmonary disability are referred to the Saranac Laboratory for evaluation, they are studied for four days. A complete medical work-up is carried out. An attempt is made to determine the precise nature of the dyspnea, cough or pain complained of. Pulmonary function studies are made. It has been found that the primary cause of dyspnea in these patients is a low pulmonary capacity.

G. W. H. Schepers, M.D., D.Sc., director of the Saranac Laboratory, presented "A Clinical Study of the Effects of Inhaled Calcined Gypsum and of the Talc Mining Dust on Human Lungs." Evidence was presented showing that talcum powder when inhaled produces pulmonary fibrosis. Dr. Schepers concluded that talc was a dangerous substance to breathe and that tremolite was the toxic agent which produced the fibrosis.

J. W. G. Hannon, M.D., medical director of the McIntyre Research Foundation, read a paper on "The Pulmonary Disability Associated with Coal Mining." The inhalation of excessive quantities of coal dust causes focal emphysema. Slides were shown to illustrate this observation. Focal emphysema means dilatation of the respiratory bronchioles.

Harriet L. Hardy, M.D., from the Massachusetts General Hospital, reported on "The Disability Found in Persons Exposed to Certain Beryllium Compounds." Berylliosis has been called "beryllium sarcoidosis." The latent period between the exposure to beryllium and the development of the characteristic granulomatosis may be as long as ten years. The ore from which beryllium is extracted, beryl, does not cause the disease. Dr. Hardy has been able to collect 271 cases of beryllium poisoning; seventy-two of these people are dead. One hundred twenty-six of these patients were exposed to beryllium in the fluorescent industry (they were exposed to the beryllium-containing phosphors). Seventy-five of these 271 cases of beryllium poisoning were employed by firms extracting the metal from beryl ore. Forty-four persons had been engaged in handling beryllium or its compounds. Twenty-six of these individuals with beryllium poisoning were not employed in the manufacture or use of beryllium but had lived or worked in proximity to atmospheric contamination with beryllium. The use of cortisone gives some relief of the symptoms of beryllium disease. Gardner's term of "beryllium sarcoid" for chronic beryllium poisoning may be accurate.

Kenneth W. Smith, M.D., medical director of the Johns-Manville Corp., New York City, spoke on "The Pulmonary Disability Attendant on Asbestosis." Asbestos is a term which includes several fibers of anhydrous magnesium silicates of different chemical composition. The largest asbestos mines are in Canada and Africa. Three stages in

the development of pulmonary asbestosis are described. In the first stage, the chest x-ray shows a fine, diffuse infiltration in both lower lung fields. In the second stage, the infiltration has increased and the heart borders have become indistinct. In the third stage of asbestosis, the pulmonary infiltration is increased. The apices of the lungs remain clear. The heart borders are now obscure due to the pulmonary infiltration. Cor pulmonale supervenes. The lung loses its elasticity and becomes "tight." Slides were shown showing soft silky asbestos fibers mined in Canada and the short brittle asbestos fibers mined in Africa.

This concluded the February 9, Wednesday morning session of the conference.

The afternoon meeting was opened by G. W. H. Schepers, M.D., D.Sc., director of the Saranac Laboratory, reporting on "The Experimental Study of the Effects of Inhaled Hydrous Calcium Silicate, of Calcined Gypsum and of Talc Dusts on Animal Lungs." Experimental work indicated that the "asbestos body" characteristically found in the lung of the asbestosis victim, is really a tremolite fiber surrounded by tissue reaction. Following this, Dr. Schepers reported on "The Experimental Study of the Biological Action of Rare Earth Oxides and Fluorides, Tungsten Carbide, Cobalt and Glass Wool on Animal Lungs." Tantalum inhalation causes bronchitis, some alveolar thickening and bullous emphysema. Tungsten inhalation causes a greater degree of bronchitis. Cobaltic oxide causes some cellular reaction beneath the muscle bundles of the bronchioles. Tungsten carbide causes periarteriolar scarring. Cobalt inhalation is prone to cause acute pneumonia. Distention and dilatation of the bronchioles occurs. The inhalation of tungsten carbide and cobalt result in thickening and metaplasia of the bronchial epithelium. There is also a peribronchiolar, partly cellular, partly vascular and party fibrous, reaction. Glass fibers produce chronic bronchitis, extensive peribronchial prolifieration and scarring and focal necrosis in the lung. Inhalation of rare earth fluorides produces an exuberant giant cell reaction but more spectacular is the bullous emphysema of the alveolar ducts.

W. Clark Copper, M.D., chief of the Occupational Health Field Headquarters, Cincinnati, Ohio, read a paper on "The Radon Problem in Deep Level Mining." Experiences in the uranium mines of Europe revealed that of the miners exposed to radon air concentrations of 1,000 micron-micron up to 53 per cent developed carcinoma of the lung. An examination of 733 uranium miners in the U.S. in 1952 revealed that a large proportion of these miners were exposed to concentrations of radon above 1,000 micron-micron per liter of air. Uranium is of widespread occurrence. High concentration of radioactive substances has been demonstrated in uranium mines and appreciable concentrations in non-uranium mines.

Malcolm L. Roberts, M.S., M.E., of the Saranac Laboratory, read a report on "Practical Aspects of Estimating Atmospheric Dustiness." This was followed by Clifford S. Gibson, chief engineer and secretary of the committee on silicosis of the Mines Accident Prevention Association of Ontario, who spoke on "Current Problems in Dust Control in Metal Mines." The summary of this paper is: The most important problems in dust control in any mine is the provision and maintenance of a stimulating interest in this subject. Management holds the key. If its attitude is good, much will be accomplished. If it is not, results will be mediocre. It is so easy to do what the ostrich did, or to put off till tomorrow things that should be done today. It is folly to assume, for any reason, that 'it can't happen here.' Indeed, it is the author's conviction that, despite the good history of health in some industrial occupations, prolonged exposures to high concentrations of any dust do no good and in time may do harm. They are also bad for morale and affect efficiency adversely."

Carey P. McCord, M.D., acting conference chairman, from the University of Michigan, concluded the conference by stating his views. He questioned the probability of an obliterative vascular disease in the lungs being the primary action of the toxic dusts. Further, the evidence that the use of aluminum inhalations prevents silicosis is not conclusive; control groups have not been used. He did not approve of the general use of lung biopsy holding that many industrial diseases of the lungs such as silicosis are quantitative diseases. Dr. McCord stated that there were four outstanding features of this conference.

1. That so many people (over 200) were interested enough to attend.

2. The abandonment of the idea that it is the soluble silica that causes silicosis and the replacement of this with the idea that some surface phenomena of the silica particle is responsible for

(Continued on Page 71)

And Then Came "Medic"

By Leland I. Doan
Midland, Michigan

THIS evening I face you with a great deal of Arthur Godfrey's so-called humility. I appreciate the vital nature of the topics discussed at your meetings, and I therefore feel doubly honored: first, at having been asked to address a group of people whose time is extremely valuable not only to themselves but to others; second, by the fact of the citation which your organization has so graciously accorded our television program, "Medic."

I should like to think of the citation not as a tribute to Dow, or to a series of weekly pictures on the nation's television screens, but as a tribute to a lot of pretty fine, courageous and devoted people.

To the man who conceived the idea . . . and invested—*gambled* it was then—many months of his time in preparing himself and in getting enough of his idea on paper so that others could see the image.

To the men of the Los Angeles County Medical Association who had the courage and foresight to endorse the idea, and who gave, and still give, generously of their time to make it better.

To those in the National Broadcasting Company who had the courage to throw in with a program radically different from anything else ever tried on television.

And, finally, to some of our own people who looked over availabilities, turned down some assured audiences, and came back and said, "We think this thing Medic is the kind of program Dow Chemical should be associated with."

It would be very easy to look at Medic today and say, "Why didn't someone do this long ago? It's so logical." But you can bet that until a very few months ago there were crossed fingers in New York and Midland and Los Angeles. It took an unusual writer, an unusual producer, some unusual doctors and some unusual advertising people to bring Medic into its present state of reality. And no matter what the formal wording, this citation from the Michigan State Medical Society is in reality a pat on the back to all those people for having had the ingenuity and the courage to be *different*. As they massage the cramps out of their fingers, I know they will receive it with heartfelt thanks.

I should like also to extend in advance my congratulations to those others—those men of your own ranks—who are being honored here tonight. They likewise, in one way or another, have distinguished themselves by being different.

I was particularly interested to note among them Dr. Theodore Klumpp of the American Drug Manufacturers Association and the American Pharmaceutical Manufacturers Association. For many years, my company has had a very close and pleasant relationship with the drug and pharmaceutical industries. They, in a sense, take up where we leave off, taking chemical developments and fitting them to the needs of medical science. They are our chief liaison with you people, with medical science.

All of which serves to remind me—as I am reminded almost daily—that in this great and exciting age of scientific advance our progress is not a single filament but a strand of many fibers. No single science stands alone but at once leans upon and helps support all the others. However far the practice of medicine may seem from the development and manufacture of chemicals they have much in common. You and I share our present and our future.

One of my earliest contacts regarding this occasion tonight was with your associate, Dr. Fernald Foster of Bay City. It is only fair to tell you that Dr. Foster had something of an inside track . . . because years back, when there were some young folks around the house, Dr. Foster was the Doan family's baby doctor. In the intervening years, some of us at least have learned to say "pediatrician." And I suppose that is progress. But the old system did have one advantage—when you said baby doctor, you ran no risk that your friends would think you

Presented at the Michigan Clinical Institute, Detroit, Michigan, March 10, 1955.
Mr. Doan is president of the Dow Chemical Company, Midland, Michigan.

were having your kid's measles treated by a shoe fitter.

Anyway, Dr. Foster among others suggested that you might be interested in a little background, or backstage view of Medic. I expect most of you have read some of the critic's comments and know that they are not unanimously laudatory . . . and I would expect that your own personal opinions would be likely to run in about the same ratio. I presume also that some of you have read of its background from the production end. The basis of our connection with it, and the reactions of the viewing public, however, are less well known.

A young man named Jim Moser was the brain behind the idea. Something of a veteran newspaper, radio and movie script writer, he got the idea three or four years ago, haunted Los Angeles hospitals, wrote a horse opera or two now and then to pay his rent, finally got the blessing and co-operation of Los Angeles County Medical Association—and then couldn't sell the thing to any of the networks.

Finally, Tony Miner of NBC, a former Broadway producer with an excellent standing as a television producer, got hold of the script that had already been turned down, changed the title page and presented it all over again—or so the story goes.

Thus enough financial backing was arranged to produce the pilot film with which the series was launched last September 13 and repeated in January. This, incidentally has been the most controversial episode to date, and it is interesting to note that most of the controversy was within the medical profession rather than among laymen.

That is what you might call the artistic side of the story. With all due respect to art, there has to be another side—a commercial side—which is where we came in.

Medic, in our opinion, is as fine a piece of creative work as has come down the television pike in a long time. It has human drama of a kind that touches the lives of not just a few isolated individuals but, one way or another, of almost every family. It has beauty. It has an inherent power for education, for the building of confidence in medical science, for the spread of sympathetic understanding of the afflicted.

And do you know something? It costs money!

Dow Chemical had money, thank heaven (I hope it always has) and was looking for a major network program at the same time Medic was looking for a sponsor. The reason was because, like Jim Moser, we also had been working on an idea.

Actually, our idea had its roots, although not its reality, back in the period of the second World War when we developed a plastic film which was used for the protective packaging of machine guns, carburetors and various metallic assemblies which would be subject to corrosion in transit. Our Type M saran film, as it was called, was of relatively heavy gauge and had a slightly yellowish cast. I don't expect odors could get through it . . . but, then, they didn't have to, because the stuff itself had a pretty awful aroma. But it surely did resist moisture—and that was what was important to the machine gun.

After the war, we naturally began trying to fit this material into civilian clothes, and since the preservation of metal in domestic shipment is not a great problem, we obviously had to look elsewhere for a market.

Because saran was such an excellent moisture barrier, it looked like a "natural" for protecting foods—for keeping them fresh—*if* we could clean the stuff up enough so it could be placed in contact with food. You will recall it is only since the war that packaged foods, as we think of them today, have really come into their own. I mean the vegetables, the cheeses, the lamb chops. It is part of the great swing to super market and self service grocery buying. In this field, transparency and moisture resistance are great advantages in a packaging material.

We had those two, so our research people went to work on the less desirable qualities of saran. It wasn't an easy job. They had to work with everything from the basic raw materials to the spools the film was wound on. Some worked with chemicals; some worked with machinery and production techniques. But ultimately they got it—a film that was clear, clean odorless . . . but still pliable and, to all practical purposes, moistureproof.

At this point, our sales and technical service people began working with food packers, and before long saran-packed foods began to show up on the grocery shelves—cheeses, dried fruits, processed meats. You could even buy a pair of dill pickles, complete with brine, put up in a little sealed envelope of saran film.

From this stage, it was logical to visualize the

material's possibilities as a household wrapping material—and we first did what was most logical for us. We tried to market Saran Wrap through an independent distributor.

I say this was logical. To understand that, you would have to know that Dow had never marketed a major consumer product directly and under its own trade name. Our company is nearly sixty years old. Yet millions of people have heard of us only in the past couple of years . . . and millions more only since last September 13.

Without going into detail, let me say that our distributor system didn't work out for the very good reason that no distributor was in a position to put the advertising push behind saran that it takes to really peddle a new product on a national scale.

So we took it over ourselves, and after some intensive market testing introduced Saran Wrap nationally about a year and a half ago, with participating television promotion as the chief salesman. That is, we participated in sponsoring Dave Garroway, Kate Smith and Your Show of Shows.

The result was encouraging, but it didn't take long for us to see that we really needed our own program—a good program in a good evening time spot. So Dow Chemical, who had never even dreamed of sponsoring a radio show, went shopping in the vastly more complex and expensive market of television.

I don't know how familiar you are with the television business, but I do know that a lot of people who write us letters have the popular misconception that everything that happens on the screen is directly traceable to the sponsor. That can be both good and bad. A couple of people, for example, think we are downright traitorous because our hero is medicine instead of chemistry.

Well, you buy television programs at the meat counter. If there aren't any lamb chops, extra thick—then you take beef or pork or whatever is available.

I won't tell you what was available, but we couldn't be quite happy with any of them—except one, that is. And that was a completely untested program. It might be a sensation. It might also fall flat on its face. Having gambled all the way, I suppose it was not surprising that we chose to gamble on through the final step.

Now, I wouldn't want you to think we just threw our money on a number and spun the wheel. You don't run a business that way—not for long. We were convinced that Medic had excellent dramatic quality and a lot of human interest. Also we felt the public might be getting a little bit tired of froth . . . and a little bit tired also of murder, quizzes and give-aways. Tired enough, at least, that they would welcome something different. Nonetheless, it is always hard to outguess the public.

Of one thing we were sure—Medic was not a program we would ever have to be ashamed of or apologize for. It had a worthwhile message to get across. While it is very necessary to be commercial, it is mighty nice to feel that while you are being commercial you are at the same time contributing some sort of plus value to society.

Well . . . it has been an interesting experience. It has been interesting from a sales standpoint; it has been interesting in other ways.

People react. Some of them even write letters. And it is a good thing they do. Otherwise, you would have to spend money for surveys all the time to find out what they think about you. Their reactions have been very interesting to us, and I think they may be to you.

First of all, of course, their letters proved our original notion that the program would be controversial. They don't just write to say hello.

Among the adjectives which crop up repeatedly are words like marvelous, terrific, morbid, educational, corny, enlightening, revolting, superb, horrible and so on. For our public relations people who screen all these letters, it has been quite a study in the remarkable number of superlative forms the English language possesses.

But they put forth some very interesting thoughts. Each piece of mail is an approach to the unknown. You never know what you will find in it. A father in Mississippi, for example, writes: "Medic is the most thrilling show we see and idolizes some of the real heroes and heroines of civilization. It has already inspired my youngest son to become a doctor."

We get quite a few comments of that sort, but I like this gentleman's final remark: "Even though he may turn out to be only an ordinary workingman like his dad, this is *good. His sights are raised.*"

The next might be like this one from another father in St. Louis: "At the conclusion of this

program, we were all sick to our stomachs. I feel it my civic duty, . . . If I can be of further service to you in *eliminating a menace to society,* which I feel this picture is, you may contact me at any time."

And then perhaps, from a woman also in St. Louis: "The moral message cannot be cast aside. May we all learn tolerance, love for our neighbor and a clearer concept of how understanding and consideration for each other can enrich all our lives."

Or, from a girl studying speech therapy in spite of the antagonism of her parents: "Your program and its superb illustration of a child tormented by a speech defect, and his reactions to treatment, served to convince my family of the need for speech therapy. I shall be eternally grateful."

As you might expect, they write asking medical advice—a problem we are thankful to be able to pass along to the Los Angeles County Medical Association. They also ask for programs dealing with subjects in which they happen to be interested. All sorts of subjects. One wants us to take up multiple sclerosis. Another says: "Could you show us the causes of gas on the stomach."

Some of them have medical ideas. An epileptic blames his condition on the fact that he was a bad little boy and smoked cigarets when he was young. Another wonders whether, since hemophilia is tied in with some sort of protein deficiency, would egg yolk be helpful in treating it. Another notes that leukemia stops at the placenta. Why not isolate the substance that accounts for this phenomenon?

Concerning the same episode, one will accuse us of disgustingly poor taste and another will accuse us of cowardice because it wasn't bloody enough. One will proclaim new faith in the medical profession and another will rebuke us for giving it a boost.

The program on breast cancer scared the wits out of a girl who had just undergone removal of a benign tumor. Another woman with a lump in her breast of long standing was given the courage to have it examined the next day. Before the week was out she had undergone a radical operation and had a new interest in life—giving pep talks to other patients. Her favorite weapon —Medic and its quotation: "I wept because I had no shoes, and then I met a man who had no feet."

This is not just an interesting experience. It is a stimulating and inspiring one. It does, however, have its lighter moments. One man, evidently of somewhat sadistic tendencies, said: "Great! Terrific! My wife cried all the way through."

Another says: "I wanted to turn it off, but my wife likes it. So we watched it." Well, naturally.

I think our prize letter on the first program came from a woman in Los Angeles: It was dated September 13, 9:31 p.m. And it read: "Gentlemen: Whew!"

Professional reaction has been almost as mingled as that of the public. Of the first program, doctors were much more critical than the public —of certain techniques; of possible psychological effects. Since then, however, I think they have fallen into about the same ratio as laymen. Some still feel Medic may create needless fears, but most seem to think it is doing a good public relations job for the profession.

Our good friend, Dean Furstenberg, wrote me recently: "Both as regards the composition of these presentations and their immeasurable educational and public relations value, the highest terms would not be misplaced in their praise."

Each of you will have your own reactions, based on what you have seen and, doubtless, on what you hear from some of your patients.

I have rather run the gamut of public comment in pointing up the extremes and the contrasts. I think I might be leaving you with a warped impression if I did not summarize by saying that general reaction has consistently been 90 to 95 per cent favorable. Incidentally, the mail, the unsolicited comment, tallies very closely with solicited comment received through some telephone surveys we have had made.

From your viewpoint, it should be interesting that a substantial number of people project one or both of two thoughts. That they have received new hope or faith or courage or understanding. That they have a new appreciation of the medical profession and of medical science.

Taking this as a base, you should be interested also in knowing that, quite surprisingly, we have developed an amazing juvenile and teen-age audience. I'm sure most of us regarded Medic as pretty much adult fare. We did not expect young people to be especially interested—and commercially that was cause for concern, because children are well known to wield a great influence over the nation's televiewing habits.

To our surprise and delight, the youngsters are among our most enthusiastic fans. Numerous parents make some comment such as: "The only program the children are permitted to stay up after 9 o'clock to see." Or: "My eight-year-old daughter was enthralled." "Good for the whole family." And so forth.

We find evidence that Medic is a growing topic of schoolroom discussion, and in a number of cases credit is actually given for viewing and reporting on the weekly episodes. Of course, a fair percentage of our mail is from the teen-age group.

My thought is simply that if Medic is having a truly constructive influence upon adults, it is logical to theorize that it may be having an even more constructive influence upon the coming generation.

If people are learning something from Medic, we are in turn learning something from people . . . or about people. Some rather intangible things, perhaps, but nonetheless interesting. At least in this first venture of ours into the consumer market, we are getting some first-hand glimpses into human psychology.

For some reason, which I suppose any psychologist could explain, we find many people a trifle embarrassed. They do not want to be thought cranks or chronic letter writers. A surprising amount of correspondence starts with: "This is the first time I have ever written to a program." Or some similar phrase.

We find a certain amount of mob instinct—or perhaps the desire for group support. "Everyone I have talked to feels the same way." And it doesn't make any difference whether the reaction has been critical or appreciative. Evidently, birds of a feather really flock together in their televiewing.

We find many of them a bit wistful. They hope for, but do not expect, recognition. "I don't suppose my letter will even be noticed." Or something like that.

Well, they *are* noticed and they *are* answered—every one of them that has a legible name and address—and we manage to stretch that word "legible" to include some pretty strange handwriting. One of our public relations men says this has even made him tolerant of the handwriting on the prescriptions his doctor gives him.

We find at least a few things that are encouraging in considering humanity as a whole. One of them is that people are sick and tired of the twelve-year-old-mind concept that has for so long pervaded many areas of mass communication. They are appreciative of what many of them term "the one program that gives us credit for having any brains and maturity." And they say so with vigor.

As a corollary to that, many have remarked about what they term the "good taste" of our commercials. This could mean several things, but I'm sure, among others, it means they're tired of being shouted at.

In that regard, you might be interested to know that we experimented with elimination of the commercial break in the middle of the program. The idea was so appreciated that we have done something entirely sacrilegious and eliminated it entirely. Unless future sales results prove disappointing, we expect to continue this policy. I sincerely hope we can.

The other really gratifying thing we have found out about people is that they are knocking the tar out of the old idea that man is more prone to criticize than he is to commend. I told you that our response has been 90 to 95 per cent favorable. Now, we all know that you can't put on any kind of a program that will be universally accepted and enjoyed. So I think that ratio is pretty fair. In fact, it has been borne out by the telephone surveys when people are asked point blank, "What did you think of the program."

I can only conclude that when nine out of ten people will take the trouble to write to say something nice, instead of to gripe, people are a lot nicer than most of us think they are. That is something to muse on any time you find yourself becoming cynical about humanity.

Well . . . that is a behind-the-scenes glimpse of Medic. It really is just a glimpse, but I hope enough to give you a little broader perspective of what has already become a Monday night institution in perhaps eight million American homes. We hope it is a *good* institution. If it is, I think it is because there is a lot of sincerity behind it all along the line.

That it is an institution can be laid to the fact that all along the line certain people were willing to venture into an unknown field. It didn't *have* to be Jim Moser. It didn't *have* to be Los

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Routine Lesser Saphenous Vein Stripping

By Matthew Peelen, M.D., F.A.C.S., and
Kenneth M. Vander Velde, M.D., F.A.C.S.
Kalamazoo, Michigan

THE JOURNAL of the American Medical Association has recently editorialized on the evolution of the present treatment of varicose veins in the lower extremity.* The article states, "The consensus today is that the best treatment for varicose veins of the lower extremity is the radical removal of the main trunk of both the long and short saphenous veins."

The authors have routinely used greater and lesser saphenous vein stripping for a period of three and one-half years now and feel that it gives superior results in the treatment of varicosities of the lower extremities. Prior to this, multiple ligations with the usual saphenofemoral junction dissection was used; and prior to this, saphenofemoral junction dissection alone was employed. Comparing our results with these two former periods, we have been particularly impressed with the fewer numbers of vein injections that we have had to do on each individual patient. For a short period of one year before doing the lesser saphenous combined with the greater saphenous stripping, the greater saphenous alone was done and lesser saphenous was done only occasionally when this seemed to be involved. Because we were stripping all other veins that we could possibly remove in the leg, it seemed only natural that we should combine the lesser saphenous group with this procedure. Our clinical impression is that the combination of both systems has been superior to the single greater saphenous stripping. It has been difficult to find any clinical test to prove results, and one has only a clinical judgment. It is a natural inclination to feel that a surgical technique that one employs and is enthusiastic about is superior. We do know, however, that postoperative vein injections have been greatly reduced. Many of these patients were followed for several months postoperatively and given injections every week. At present, it is the very unusual circumstance that we have to give more than two or three injections. During much of this period, the same injecting fluid has been used in order to evaluate this aspect of treatment.

Recurrences have been minimal. About 3 per cent of patients have had to have multiple ligations of a few places in each leg.

Technique

Marking of veins has been imperative. Marking material should consist of a solution† or of a skin pencil that will not be destroyed at the time of preparation with the antiseptic. The marking is done either in the office or in the hospital the day before the surgery, and preferably before the patient has had a chance to be in bed for any length of time. The large varicosities are completely drawn out on the skin from the groin to the leg. Suspected perforating areas are marked at right angles to the vertical markings. Large grape-like areas are circled.

The patient is given a general or spinal anesthetic. With the patient on his back and an assistant holding the toes of both legs, the legs are elevated and a complete circular preparation is made of both extremities up to above the groins. The legs are dropped on a sterile sheet, and inverted sterile rubber gloves are applied over the toes. The drape is placed above the groin and a folded towel between the legs, completing the preparation and draping of the patient.

Incisions are made at the crease of both groins, and the saphenofemoral interruption is done. Vertical incisions are made simultaneously anterior to the internal malleolus and slightly superior to it. During this part of the surgery, we are very careful not to touch or traumatize the malleolar bone and have felt that there is much less postoperative pain in this area if this rule is adhered to. The saphenous here is picked up, divided and followed distally where it divides in two or three branches. These

*"Varicose Veins of the Lower Extremity." J.A.M.A., 157: No. 6 (Feb. 5) 1955.

†Pyrogallol 2½ gm.
Acetone 25 cc.
Merric Chl. Tr. 20 cc.
Alcohol q.s. to 50 cc.

branches are clamped and tied with sutures, and the intervening veins are excised. A twisted or piano-wire stripper is passed retrogradely up the greater saphenous vein to the groin. The vein is tied on the greater acorn at the ankle, and the vessel is stripped out to the groin. The suture used to tie the vein at the malleolar area is left long. This has been helpful occasionally when it is necessary to incise the leg at some point between these two areas in order to pick up a section of vein which has broken off during the stripping.

Large grape-like areas are usually completely excised, pulling out all tributaries or ligating them. The larger ones which seem to lead away from the grape-like area in either direction are explored with a small stripper, and if these veins are of any length, they are stripped out.

We have found it helpful in cases of high ligation only to pass the stripper from the malleolar area before the groin incision is made. In this way, the saphenous can be easily located at the groin and it is not necessary to dissect through the thick scar tissue resulting from previous surgery. The femoral vessels which lie below this thick scar are more easily identified by this technique.

We have not found it necessary to keep the patient with any dermatitis in bed before surgery. These patients are usually instructed to wear elastic supports of some sort and to be off their legs as much as possible for the two weeks preceding surgery. This is usually sufficient, and without signs of frank inflammation we have not had too much postoperative inflammatory changes.

Incisions in these areas of indurated skin and areas of dermatitis are closed with a few fine single silk sutures close to the edge of the incision in order to prevent ischemia of the skin edges. Occasionally, we have found it more beneficial to leave these incisions in the malleolar area completely open in this type of skin. The groin incision is closed with a subcuticular stitch of nylon suture. Prior to the use of this suture at the groin, patients complained quite frequently and severely about the suture pain of interrupted ligatures. The use of the subcuticular suture has almost completely done away with this complaint.

After closure of all incisions on the front and inside of the leg, the patient is turned over and redraped above the knee. Incisions to pick up the lesser saphenous vein are made in a vertical fashion just above the external malleolus and halfway between the Achilles tendon and external malleolus. The sural nerve is identified running close to and parallel to the vein. The identification of these two structures in the indurated leg is often difficult. It is advantageous occasionally to incise the structure longitudinally to see whether it is vein or nerve. After division of the vessel, the short saphenous stripper is passed up the lesser saphenous vein as far as possible. Incision is usually then made posterior to the knee at the crease of the knee joint, over the palpated stripper head. If the lesser saphenous vein lies below the fascia, a large hole is made in the fascia, and this is not closed at the completion of the vein stripping in this area. We have felt that a large incision in the fascia in this area gives less pain than a smaller incision or when we have closed it. The lesser saphenous vein is not completely followed down to the popliteal vein nor tied off flush with this but is divided at the knee level and stripped out.

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the fibrosis, the exact nature of this action on the surface of the silica particle not being known.

3. That talc alone is capable of causing fibrosis of the lungs.

4. That there is so much pulmonary dust disease and how poor the statistics in this country are on the exposure hazards and on the occurrence of the various dust diseases of the lungs. To make any progress in this field, much better statistics are necessary.

This concluded the eighth Saranac Symposium on Occupational Chest Diseases.

Continuing Therapy for Hard-of-Hearing Patients

By Stahl Butler
Lansing, Michigan

MUCH yet can be done for the patient with permanently impaired hearing when the family physician and the otologist find that there is no medical cure. For advice on hearing aids; for auditory training; for lessons in lipreading; for guidance, training and placement; and for help in overcoming the psychologic effects of his condition, he can be directed to skilled persons who have been trained to help him.

Excellent non-medical facilities offering most of these services are available after medical clearance through the Constance Brown Society for Better Hearing, 316 Commerce Building, Kalamazoo; Speech and Hearing Clinic, Institute for Human Adjustment, University of Michigan, Ann Arbor; League for the Handicapped, 1401 Ash Street, Detroit; Ford Hospital, West Grand Boulevard, Detroit; Speech and Hearing Clinic, Michigan State University, East Lansing; Wayne University Speech and Hearing Clinic, 656 West Warren, Detroit; Speech and Hearing Clinic, Central Michigan College, Mt. Pleasant; and the hearing testing mobile unit of the Michigan Association for Better Hearing, 408 Hollister Building, Lansing.

The mobile testing unit of the Michigan Association for Better Hearing is specially built and equipped to offer the rural areas of northern Michigan the same hearing testing facilities found now in the above hearing and speech centers. This trailer is maintained in northern Michigan and its itinerary and present location can be obtained from the Association's office. Pure tone audiometric test by air and bone conduction is routinely given in all cases. By means of a conventional two-room testing arrangement, speech reception techniques are available, including a determination of the speech reception threshold and speech discrimination score. These tests can be used in the evaluation or selection of a hearing aid. Where the need is indicated, counseling is offered regarding the hearing loss, lipreading, the use of a hearing aid, and related auditory problems.

Mr. Butler is Executive Director of the Michigan Association for Better Hearing.

The Michigan Association for Better Hearing is a clearing house for all non-medical information for the hearing-impaired adult, and for those who are interested in helping him. Questions pertaining to the hard of hearing can be answered at this social agency, and information is available for complete rehabilitation services fairly near to most communities in southern Michigan. Facilities in northern Michigan are meager, but some are being developed.

Many people have the mistaken notion that lipreading, or speech reading, is used only by the severely hard of hearing, or the deaf. In fact, this skill is used to great advantage by many people with normal hearing and is the only non-medical assistance for people with slight losses that do not justify the use of a hearing aid, and for people with low discrimination scores. Because the sounds that are the most difficult to hear are the easiest to see on the lips, and vice versa, a hearing aid and lipreading supplement each other perfectly and provide social adequacy, even for people with severe hearing losses. Though a hearing aid may help a person to hear much better, the hearing aid *never* provides normal hearing, and there is *always* the need to supplement the hearing aid with lipreading.

The shy withdrawn patient, suffering from a psychological overlay, benefits greatly from the group aspects of a lipreading class, or the social program of a chapter of the Michigan Association for Better Hearing, of which there are twelve in southern Michigan.

Vocational guidance, training, and placement are available to hard-of-hearing people through the Office of Vocational Rehabilitation.

Speech correction instruction is available through the public schools in most major southern communities and to a limited extent north of Bay City.

When the doctor has nothing more to offer the patient in the way of medicine or treatment, he

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Problems of Medical Education

Deans' Panel

J. E. Livesay, M.D.
Moderator

J. E. Livesay, M.D., Speaker: Pursuant to the direction of last year's House of Delegates, we are preparing and presenting at this time a panel on undergraduate medical education. Here on the platform we have Dr. A. C. Furstenberg, Dean of the University of Michigan Medical School, and Dr. G. H. Scott, Dean of Wayne University College of Medicine. In addition, we have Dr. Wayne Whitaker, Assistant Dean of the School of Medicine, University of Michigan.

Leading off our discussion will be Dr. Scott, Dean of the School of Medicine, Wayne University.

G. H. Scott, Ph.D.: I want to thank you for the privilege of appearing before you and discussing some of those things that are important to all of us. I refer especially to the undergraduate medical school and some of its problems. Your interest in undergraduate medical education is heartening and timely. In the last ten years the interest in basic medical education has been sharpening, and this has led to studies of the many problems involved.

The curriculum, which had been allowed to grow unpruned for the last seventy-five years, was in for a little trimming, if not for major surgery. I am aware of no medical school in the United States or Canada in which turmoil does not exist and new methods and new approaches are not being tried.

You could ask why. Maybe our product isn't satisfactory. Even though it is more fully packed than ever before, perhaps it is not quite as well rounded. Maybe our product does not wear as well as you people seem to wear. It may be that the cost has become so great that a declining ability to use our product will cause us to revert to something cheaper in time and in money. This I don't happen to believe, and I just raise the question.

Maybe we need more time. Certainly, just like all of you, we need more money. Your Committee on Rural Medical Service has raised some questions which your good Secretary forwarded to Dr. Furstenberg and to me. A few of these I would like, with your permission, to touch upon very briefly.

Presented at a meeting of the House of Delegates, Michigan State Medical Society, Grand Rapids, September 26, 1955.

There was a question regarding the motivation of students. The motivation of students has always been a mystery to me. To begin with, the motivation one day is never what it is the next. Motives change. Students mature. There are students who start with the very highest of ideals of human service, and they may change these ideals when they come face to face with the hard realities of the last two years of medical school. Perhaps the acquisition of a family in the process of going through school also tends to change their ideals. They realize that responsibility is inescapable, and that they have to meet it.

I have just cited one or two things which change ideals. I have never seen a group of medical students coming into medical school who did not have in the beginning the very highest and finest of ideals in practically 95 per cent of the class. Sometime along the way, they tend to grow up. They mold their ideals to their own particular needs, just as you and I. I think the medical students we are getting now are no better or no worse than those in the medical schools twenty-five or thirty years ago. They are very human individuals, just like you want them to grow up to become if they are to be good doctors.

There was a question raised and directed toward the idea that medical schools might not be teaching students to become general practitioners as much as they once did. It has been my impression, both from my own experience (which isn't too great) and from reading, that undergraduate medical education has always been directed toward general practice, and that it has not deviated one whit from that idea. In four years, you cannot educate anyone to be anything more than a general practitioner.

The cry that now medical schools are training for specialties does not imply a fault in the medical school—rather it is a sign of changing times. It reflects a changing of the desires of those who want to become physicians.

It has been suggested that medical schools have too many specialists on their faculties. I would like to point out to you a general answer to this question—that a medical school is not unlike a small university or college, and medical schools have gone through exactly the same things in development as the small colleges and universities have.

One hundred fifty years ago, it was possible to

have one man on the faculty to whom was delegated the responsibility of teaching general science. He taught chemistry, biology, physics, mathematics. The body of knowledge and, as well, the student demand, has changed this whole pattern. It is no longer possible for one man in a small college to teach biology, physics, chemistry, mathematics, and coach the football team at the same time.

We have specialists now in the colleges, even in the colleges of liberal arts, who teach chemistry, those who teach physics, those who teach history, those who do this, those who do that. Medical schools are in no wise different, and the time relationship of this development are almost identical.

The same reasons that cause a student to become interested in chemistry or biology in the undergraduate college are applicable to medical school. Students become interested in a man who represents a body of knowledge. He is a stimulating factor to them. Consequently, they wish to emulate him.

In medical schools, the situation is exactly the same. The students are attracted to one specialty or another or to general practice as they see the man under whom they study, and this is a perfectly natural phenomenon, one which you should not want to alter.

If I may, I shall make a few remarks about the selection of students. This is at the same time the hardest job and the most important one that we have. The job is not to select those students who, we think, will make good doctors, because we don't know which students will make good doctors. We have absolutely no way of judging this. Our task is to select those students who, we believe, will be successful in medical school, and we can only hope that they will become good doctors.

I don't know of any way of telling whether a doctor is a good doctor until he is finally dead and someone eulogizes him. [*Laughter*]

Each medical educator has his own methods of selection. They all strive as hard as they can to be thoroughly objective in that selection. They know, I am sure, that good medical protoplasm does not come from any one class, race or creed of people. History tells them that. With these things in mind, they try desperately by their own methods—those which have been successful for them—to pick people who, they believe, will succeed in medical school.

There was one question raised as to how the Michigan State Medical Society might help in the selection and recruitment of students. I plead with you to confine your efforts only to recruitment! Don't ask to help in the selection of medical students. First, you don't know what you are getting into. Second, it will be the worst sort of public relations that you could indulge in as representatives of organized medicine. It would tend to strengthen the belief that the medical profession is striving to create a sort of medical royalty which would pass on from father to son or to the selected few the rights and privileges of practicing medicine. This is something that organized medicine has never been able to afford, and certainly cannot now.

One of the ways that you can best help medical schools is by really explaining what medical education is to the public, telling them what length of time is involved, what the procedures are, why it is different, why it is more costly than other forms of higher education.

You are all aware of the reasons, just as much as I am. You have been through the process. You know that you would not willingly select a physician for yourself who was educated by mass educational methods. You all know it is the personal contact and the careful, small group teaching at the bedside which made you into competent physicians. I plead with you not to ask us to do anything less in the way of medical education.

Speaker Livesay: Thank you, Dr. Scott. Now we turn to Dr. Furstenberg, Dean of the School of Medicine, University of Michigan.

A. C. Furstenberg, M.D.: In introducing this discussion, I should like to call attention to the fact that the first decade of this century saw the struggle of state universities, endowed schools, federal and state governments, to develop high standards of medical education and licensure.

Laws were enacted and enforced to protect and defend our ideals of medical training and medical practice.

In 1906, there were 160 medical schools in the United States, which represented about one-half the total number of medical schools in the world at that time. Between 1906 and 1918, half of these schools had their doors closed, and vigilant committees of the medical profession have been constantly on the watch for unethical and illegitimate forms of practice, and invoking the aid of the courts in stamping them out.

And now we come, in the sixth decade, to this very important challenge of maintaining these high standards of medical education and practice which we have developed over the past half-century.

Any discussion of this problem must necessarily call for a consideration of three important functions of a medical school: medical education, research, and the care of the sick. There is no line of demarcation between these three important functions. Each is inexorably dependent upon the other two. A medical school is only as strong as the chain that links together good teaching, sound research and unimpeachable practice.

Getting down to some of the questions that have been raised, Dr. Scott talked about the selection of the medical student. It is, of course, the solemn

obligation of the admissions committee to select good students; they must choose students who are properly prepared to study medicine. The need of a broad general education for the demanding principles of medicine was recognized some forty years ago. Our students must be prepared in a great variety of fields, particularly the sciences, in order to qualify for admission to the study of medicine.

I believe that motivation, integrity, and character are the important qualities to look for in the medical student. I know that these are rather abstruse, intangible qualities. They are often difficult to evaluate. Nevertheless, I would rather have these qualities in a student than all the A's a bulging transcript can hold.

Someone has asked the question, "What about the number of doctors in this state and in this country? Do we need more medical manpower?" We have read a great many statistics on this subject and, frankly, they have me somewhat confused. They have succeeded in doing what Stephen Leacock said could be done when giving a statistical speech.

I recall one night in Ann Arbor when he was talking to a group of professors, who were given to statistical speeches. He looked them right in the eye and said, "Now, if at any time you are giving a statistical speech and you observe a gleam of intelligence in the face of anyone in the audience, just throw in a fraction or two and you will put him soundly to sleep." [*Laughter*]

That seems to be the effect of most statistical studies of the need of more medical manpower in this country, as far as I am concerned.

I am satisfied, however, that we can use more doctors today. Some of the fields are exceedingly barren, especially public health, research, the academic fields, the basic sciences, preventive medicine, industrial medicine, anesthesiology, psychiatry, and pathology. Obviously, we can use more doctors in these fields if we are to do a better job in the practice of medicine.

To that end, an effort is being made. As you know, in 1951 we accepted 204 Freshmen. That was a large increase in the enrollment in the medical school of the University, and since that time we have accepted a similar group over a period of four years. Today, we have admitted 206 Freshmen in the medical school. We hope to meet the needs of medical manpower in the State of Michigan in the next few years.

The situation in respect to population, however, is one that should cause us some concern. As you know, we have some six million people in the State of Michigan at the present time. It is anticipated that we may have nine million or more in 1965. Certainly, something will have to be done to increase the number of doctors for this state if we are to care adequately for such an increase in our population. It seems to me that this is a problem that should come before the profession of the state, one to which all of us should give very serious consideration at this time.

Someone asks, "What about the preceptorship as a part of formal medical education?" We have given a great deal of consideration to this problem. I think it is an important one. This kind of an educational experience has its advantages. I must say, however, that in the medical schools of this country today, there is decreasing interest in the preceptorships. Some of the medical schools have abandoned this program; others have taken it up but have made it elective for the students.

This is what we have done in place of the preceptorship. Many of you know that the Senior year has been divided into five periods. Four-fifths of the class are in session during the entire year. There is a free period for one-fifth of the class—a period that lasts for about ten weeks. We have tried to assign these individuals to externships in various parts of the state of Michigan, and for the most part they have become intensely interested in this opportunity for clinical study and service. We feel that in carrying out this program, we accomplish three things: (1) We give the student an opportunity to meet not one preceptor but a staff in a hospital, where he can be instructed by several individuals interested in teaching. (2) He has an opportunity to see a great variety of patients in that hospital, even though it may be a rather small institution. (3) He renders a service to the hospital that does not have an internship program.

I know there will be many other questions raised, and I am sure Dr. Scott, Dr. Whitaker and I shall do our best to answer them.

SPEAKER LIVESAY: Thank you very much, Dr. Furstenberg.

For the benefit of the delegates and our discussers, perhaps I should read the resolution from last year, presented by Ottawa County:

WHEREAS, there is a constantly growing interest in medical education on the part of our profession and the general public, and

WHEREAS, there is a continual growing need for more physicians to serve an ever-increasing population, and

WHEREAS, there is a great need that we as physicians become more informed as to present facilities and future plans for increasing its facilities to meet this growing need; therefore, be it

RESOLVED: That The Council arrange for this panel discussion.

I don't know whether I should lead off with a question, but immediately I am caused to ask this one: *If we are confronted with a possible 50 per cent increase in population in this state, are the Deans at liberty to disclose any plans they have to meet this future need in the way of facilities?*

G. H. SCOTT, Ph.D.: I have just been elected a committee of one to answer that question.

I am sure that both medical schools are very acutely aware of the importance of trying to do what the State will be expecting them to do by the year 1975, by which time we are told that we shall have more than nine million people. This is perfectly possible, and Wayne University would like very much to increase its facilities and to increase the number of students coming to it.

We have the clinical material, in such abundance that it is a load more frequently than it is a help. An increase of faculty, the possible erection of new buildings, are all in the thinking of the people at Wayne University, and I am sure they are too at the University of Michigan.

The problem of persuading the Legislature (or whoever it is that has the money) to finance these expansion programs is one which you can all be most useful in helping us to solve. Certainly, we can't go to them alone and say, "We need this, that and the other thing," because we get the standard answer, "You always need everything."

It requires pressure and education on the part of the profession before we shall ever be able even to come close to meeting the demands for nine million people.

A. C. Furstenberg, M.D.: At the University of Michigan, we have accepted all the students who can be adequately educated in our institution at the present time. As you know, we have a 900-bed University Hospital. Moreover, we are now closely affiliated professionally with a 500-bed Veterans Administration Hospital; We have, I believe, plenty of clinical material to train adequately our 775-odd students.

However, we are now bulging at the seams, and I don't believe it would be possible to take any more students without suffering the risk of lowering the standards of medical education at the University of Michigan.

Your President stated this morning that he was much more interested in quality than in numbers. I certainly agree with him. I don't believe we can compromise with quality when human lives are at stake. And so, I doubt very seriously that it will be possible to take any more students at the University of Michigan without the risk of lowering the quality of medical education.

To date, I am certain that quality has not been lowered. I am constantly assured by the young members of the medical faculty—who are most enthusiastic about medical education and, by the way, the men who do most of the work—that they see no deterioration in the standards of medical education at the University since we have accepted more than 200 students in each entering class.

I, for one, believe that we are going to need more doctors in this state, and that there should be another medical school in Michigan. There are five medical schools in the city of Philadelphia. There are several medical schools each in the city of Chicago and the city of New York. I see no reason why this great State of Michigan should not finance and operate another medical school.

Speaker Livesay: We have had a question handed in: *"Is the American Medical Education Foundation of value? Do you receive any money from it? What can you use the money for?"*

Dr. Scott: It most assurely is of value—and if you ever have had the pleasure of operating on a tax-supported budget, and know the rigidities that are inherent in that kind of budget, then you will be the first people to appreciate that $25,000 or $30,000 of loose money, which you don't have to account for to anyone, being used in embarking on any kind of a program that will benefit your medical school, is about the most welcome and most useful thing that you ever had. That is exactly what this national fund for medical education amounts to.

We employ it for many, many purposes. Sometimes we use it to supplement the salary of a staff member, and sometimes we create new positions which later become financed by tax money. Sometimes we use it for the support of new and intriguing research problems that come up during the course of a year. Sometimes it is used for the encouragement of students to go into teaching and research in medical schools.

I could go on and on, and I am sure Dr. Furstenberg could too, for an hour or more, pointing out the ways in which this kind of money is the most valuable thing we have.

Dr. Furstenberg: I am rising at this point to express our very sincere gratitude to the members of the medical profession of the State of Michigan for the generous contributions they have made to this fund.

When you are budgeted to the last dollar in a state-supported institution, you find that a fund of this kind is a tremendous asset to the progress of medicine.

I want to point out that none of this money has been used for salaries except in a few instances when we have found it necessary in the middle of the year to engage a technician, or a young member of the medical faculty for whom there was no money until the end of the year when the new budget was prepared. We have subsidized a few such individuals in a nominal way for a few weeks or a few months until the next budget became operative.

This fund has been exceedingly important to us, and we are indeed most grateful. Over a period of the past three years, we have received a total of $72,000. Much of this money has been spent for student research fellowships. Students remain for the summer months and receive $500. They are sponsored by some member of the medical

faculty who suggests a research project for them. They are taught the methods of research, and many of these individuals have made some outstanding contributions to the medical literature which have advanced the progress of medicine.

Only this morning I gave the Borden Award, which is a certificate and a check from the Borden Company for $500, to a Mr. Abrams, who during his student years published four manuscripts, which have received national attention.

I don't want to fail to show my deep appreciation, on behalf of the entire faculty of the Medical School, for your generous contributions to this fund.

SPEAKER LIVESAY: Along this same line, Dr. Furstenberg, *"Is it practical to think that the medical profession can contribute enough to our medical school finances to obviate increasing help from the government?"*

DR. FURSTENBERG: I would have to be a better statistician than I am to answer that question. I can only say that last year the medical schools of this country, eighty-one of them, operated at a deficit of 10 million dollars. If it were possible for the medical profession and industry (and industry has contributed substantially) to raise that amount—and it does seem feasible—then it would not be necessary to turn to our Federal Government for support.

I think the Federal Government might very well support us in our capital outlay. They might construct medical schools and buy equipment for them. I should be very reluctant, however, to have the Federal Government have anything to do with the fiscal policies of the medical schools of this country.

SPEAKER LIVESAY: We have talked a lot about some of the administrative problems of the medical schools. I wonder whether you would like to hear something about student problems particularly.

Dr. Furstenberg told me that Dr. Whitaker, the Assistant Dean at Ann Arbor, is particularly interested in the problems of medical students. I would like to call upon him now for a few remarks.

WAYNE WHITAKER, Ph.D.: If we talk about medical students, we shall almost cover the whole subject, so you have given me a big assignment.

I would like to make a comment following the last question Dr. Furstenberg answered. There are nearly 200,000 physicians in the United States, and the deficit is 10 million dollars. I think you will find that is around $50 per doctor. I am reminded of a method of raising money on a small scale. Each person contributes one cent for each year of his age on his birthday. If we made it $1 instead of one cent and applied it to each doctor, we would have the 10 million dollars. That is a rather easy computation.

Students come to me with a great many problems. Sometimes they are personal, including marital, not many of the latter, however. In the present Freshman class, they have come to me even before they are registered.

There are other problems, finance and scholarship chiefly. Finance is something I do like to talk about. When I first joined Dr. Furstenberg in the Medical School Office, we didn't have many problems of finance because most of the boys were on the GI Bill from World War II. A few others could be handled through the scholarship funds we had available. That postwar bulge has passed; the few that are collecting on the Korean war benefits do not help very much in the total picture, and for some reason or other we find that more and more students need some help.

The University of Michigan does not assume any financial responsibility for the students, as I told the Freshmen at their first meeting the other evening; yet there are some funds that have been given to us for student assistance, and we use them as we can. Some of the funds are in the form of direct grants, scholarship assistance, which we have been giving chiefly on the basis of need, and not as an award for high scholarship, which will take care of a small part of the problem.

We have loan funds at the University which have recently been made available for long-term assignments, so that a student may repay after five years or after a year or so of practice. That also is limited. Time and again, therefore, I ask the student to turn to his community. If his family cannot help, is there a service club giving aid? How about going to the doctor who encouraged him to be a physician? Does he have a suggestion?

More than once, the student comes back and says, "You know, I went to my doctor, and before I even asked him the question he said, 'Maybe I can help you. What can I do?'" And they worked out something on an individual basis.

Not always is he that fortunate to have a doctor friend who will help him in that fashion. Occasionally, a request from a student from a particular county in the state, has prompted me to write the county society to see whether by chance it has a loan fund for assistance. I am happy to report that some counties do have and are using it for that purpose. Others are considering establishing one.

So far, in the few years I have been there, not a single student has had to leave medical school for lack of money primarily. There is one possible exception, but that student is back in school, having been out for two years and re-formed his finances.

That may not, therefore, be a critical problem in general, but it is very critical with the individual at times. We may need your help, for you

may be called upon even more to help that student and keep him interested in his community. Possibly we may avoid the necessity of turning to Uncle Sam for that kind of help also.

The academic problems of the students are numerous for as you know, students will get in difficulty and will find themselves near the bottom of the class and in danger of being on probation or even having to leave school. Let me hasten to add that the number of students dropping from the medical school in recent years is not high. I am told that in some of your classes twenty-five years ago there was a 25 per cent loss of students between Freshman enrollment and graduation. That was reduced to 15 per cent prewar, and 10 per cent soon after the Second World War, and I believe the national average now is around 7 per cent. A 7 per cent mortality is exceedingly low when we compare it with other professional schools.

We are not losing a large number, yet to the individual who is lost it is a major tragedy, and we are continually trying to find ways of improving that situation in the selection of students.

Dean Scott stated that well when he said the best we can do is to try to select those students who will get through medical school, hoping the rest will follow. We say it is a hope, not an achievement, at this time.

You might be interested in knowing what appears to be the chief reasons for failures in medical school. There seem to be two things—lack of a driving motivation, and the succumbing to the pressures and complexities of life, medical school and personal, to the extent that emotional stability is lost.

It appears that the emotional element, the psychic element, is the chief factor in most of the loss in the medical schools, except for a few, who quit early because they find they just don't belong there.

I would like to say something about the distribution of students within the state. You will be interested in an analysis of our students relative to their origins by counties in Michigan.

Of our students in school last year, that is, in four successive classes, we found that there was approximately one student per 10,000 population in Michigan. In Northern Michigan, that factor was 0.86. In Central Michigan, it was 0.88. Those figures are a little different from those of four years ago when I made the first study, because then Northern Michigan was just about 1.0, and Central Michigan was a little lower.

Southern Michigan, except for Washtenaw and Wayne Counties, was 1.08. Wayne County is exactly 1.0. This, of course, refers only to those who attend the University of Michigan. Washtenaw County, because a lot of people take temporary residence around Ann Arbor for education, is higher, namely, 2.29. However, Ottawa County had a figure even higher, 2.43 students per 10,000 population.

If any of you are interested, we can quote your county. It is exceedingly impressive to look at the map before me and see the large number of counties in Central Michigan that have had no student in the last ten years, apparently, attending our Medical School and, I suspect, any medical school.

Speaker Livesay: Here is a good question: *"What, and how much, is the deficit between tuition fees and the cost of teaching in a medical school? Is there anything done to encourage students to remain single and not marry during their medical education?"*

Dr. Furstenberg: The last figures compiled by the AMA, indicate that the cost of educating a medical student is somewhere between $13,000 and $15,000 over a period of four years. The tuition furnishes only about one-fifth of this sum, so you see that medical education is expensive as far as the state is concerned, and also for those who operate the privately endowed schools.

Matrimony, as regards the medical student, concerned me for a number of years, because I was one of those individuals who felt that the medical student was unduly encumbered if he came to the medical school with a family. However, I soon discovered that this was a personal matter, and one over which we had no jurisdiction.

The older members of this group probably will be appalled to learn that 87 per cent of our Seniors last year were married. Many of them came to my home, brought their children and left them in their baby carriages on the front lawn during the spring; so I know most of them were quite prolific.

Dr. Whitaker: Twenty-five per cent of our freshmen are married.

Dr. Furstenberg: Dr. Whitaker says one of them came to him this morning with some marital difficulties, and we shall see more of them before the year is over, I am sure.

Speaker Livesay: Dr. Furstenberg, here is another question: *"What is the proportion of resident and out-of-state acceptances at the University?"*

Dr. Furstenberg: Some four years ago, we felt that it was the better part of wisdom to reduce the nonresident enrollment to about 5 per cent. It now has been increased to approximately 12 per cent. The only reason for increasing this number is because we have had a rather interesting experience in respect to the number of applications.

In 1947, we received three times as many applications from students as could be accommodated. That slowly decreased, until last year we were able to accept nearly all the residents of Michigan who met the minimum qualifications.

In general, I think it can be said that we are now accepting all residents from Michigan who meet the minimum qualifications, because the deluge of applications from outside the state is no longer before us.

We are apprehensive, however, about what is going to happen in the near future. This year the enrollment in the University, as of yesterday, was nearly 21,000. It is anticipated that increasing numbers will come to the University each year.

You can count noses at the present time. If one counts the students in the elementary schools between ages ten and twelve, and if one believes that they will be as interested in higher education as were the students of the past, then the universities and colleges of this country must prepare for a 50 to 75 per cent increase in student enrollment by 1965. This will bring a great impact upon our medical schools within the next decade. There will be many more applicants seeking admission to the study of medicine.

Speaker Livesay: We have three more questions. The first is: *"How much of a problem will it be to staff another medical school? Several shortages in supply of certain of the specialties were mentioned. Do you have any information on the shortage of physicians in general practice?"*

Dr. Scott: It is a very serious problem to staff a medical school, and the shortage of capable people does not come in the last two years of teaching, because there are plenty of people capable of teaching clinical medicine.

However, the basic sciences in medicine are going to be a problem in recruitment and in education of people who will become adequate teachers. It would be very foolish for us to suppose that suddenly this is going to change and everyone will want to become an anatomist or biochemist when he knows that if he becomes one, and becomes highly successful in his field, with an international reputation, perhaps, he might eventually manage to land a post which would pay him $12,000 or $15,000 a year.

I think that is as good an answer to the problem of recruitment in the basic sciences as I know. It is an answer to recruitment problems pretty much everywhere else, so that is not an exception.

Dr. Furstenberg: I don't believe I can say anything very definite about the number of general practitioners in the country and in the state, and the number required. I can make this general statement, however, that some fifteen years ago, when I asked the Seniors in the medical school what field was attracting their interest, only two or three out of a group of 125 to 130 students would indicate a desire to go into the general practice of medicine. That was appalling. Those two or three usually were students who were financially encumbered and felt it necessary to get to the job of the practice of medicine immediately.

You will be interested to know that last year some 60 per cent of our Senior students showed a definite interest in the general practice of medicine, and stated that they were going to go into that field. I think many of them retain that notion during their present internship.

Courses have been provided in various parts of the country for post graduate study in the general practice of medicine. We have such a program at the University, which is well attended. I think it has served an excellent purpose in providing quite a few general practitioners for some of the smaller communities in Michigan. I believe the medical school has made a contribution in this particular field.

W. L. Brosius, M.D.: Maybe it's the baby buggies. *(Laughter)*

Speaker Livesay: *"Medical schools are doing a good job regarding the science of medicine. What are they doing about teaching the art of medicine? What about inculcating the ethics of medicine into the students?"*

Dr. Furstenberg: That is a very good question, and I think I can answer it this way:

Every year we have been asked to incorporate a program of medical ethics into our curriculum, and each year we have complied with this request. We have requested certain members of the medical faculty to give some lectures on medical ethics, and we have asked distinguished members of the medical profession in this state to come in and talk to our students about medical ethics. Dr. R. W. Teed, whom I see in this audience, has been most co-operative in meeting with a group of our Senior students, organizing a series of extracurricular lectures. These lectures are given every Wednesday afternoon throughout the year. They have been most helpful, in teaching the ethics of medicine.

After all, if a student comes to the medical school with character and integrity which have been taught him in his home, I doubt that he needs to be given very much preaching on medical ethics. What he observes in the classroom, the laboratories and the operating rooms, will help very much to teach him the ethics of medicine.

I think one of the very best courses in medical ethics given in our school is offered by Dr. Fred Coller, on "The History of Medicine." I have

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Editorial

DEANS' PANEL

THE DEANS' Panel on Problems of Medical Education in Michigan's two medical schools was held as requested, Monday, September 26, 1955, at 4:00 o'clock in the House of Delegates. The panel was well attended, gratefully received, and offered many items of discussion.

In the November issue of THE JOURNAL, we made some comments on this panel. In this issue, we are presenting the transcript of the panel on page 73. We hope our members will read it. The Council has already had requests that such a panel be held in 1956 before the General Sessions so that many more members may profit.

If the membership wishes such action, it will be attempted—or another panel on a different subject, if of sufficient interest.

NATIONAL LEGISLATION

EVERY new year brings new proposals in federal legislation. In 1955 the first session of the Congress considered more than 400 bills affecting the practice or interests of medicine, almost as many as the whole 83rd Congress. Such activity demands constant study and alertness in order to protect our best interests.

The President's National Health Program is now in formation but will not be published until late in January. We know certain features, however, and may predict our reactions.

Reinsurance

The reinsurance feature which was proposed last year, we believe, is nearly dead. It never was reinsurance, but a scheme to attempt "insurance" of noninsurable groups. Reinsurance is the division of responsibility for unusually heavy risks. If an insurer has such a policy or group, he may divide it with several carriers and let all of them divide the risk. This protects the solvency of all as well as dividing the profits. This has nothing to do with uninsurable risks which simply are not taken.

Health Education and Welfare Secretary Folsom has intimated that his department is seriously considering methods of extending health insurance to three groups (a) in rural areas, (b) among aged persons and (c) for major medical expenses. He is quoted in reference to "reinsurance" to have said, "We are now studying possible improvements in this proposal and other methods of reaching the same goal."

Most of the Blue Cross-Blue Shield plans in the United States are making every effort to insure rural groups—Grange and others. In Michigan we have considerable coverage in the rural areas. The chief problem is the difficulty of arranging for group collections. Individual subscriptions are accepted during certain times, and in Michigan the rural areas do have access to our prepaid, voluntary services.

Most insurance, and especially health insurance, does not accept or retain people after sixty-five (or seventy). The most important concept of the Blue Shield philosophy is to continue coverage of older people. We do not cancel their policies either for age or from being removed from their group.

One of the primary reasons for our voluntary plans was to care for the catastrophic illness. For most lower income persons, any hospitalization or extended illness is a calamity, and we built our programs to care for just that condition. Solvency, however, demanded that a limit be established. Coverage for the long continued and extreme cases has been arranged by many insurance schemes and some Blue Cross-Blue Shield plans. We have not done so in Michigan, although studies have been made. This insurance is being sold in Michigan by insurance companies.

Retirement Provisions

Our tax laws all provide that industry and employers of great numbers of people may arrange funds for annuities after retirement at age sixty-five. All the big corporations and the smaller ones, too, set aside on each payday as business expense certain percentages in funds to build endowments to pay their employes in their old age. Some employes of great corporations will receive in later years as much as $40,000 per year, these rates being dependent on earnings during active working years. Doctors and other professional self-employed

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The Physician and OASI

Last month, I pointed out to you that the MSMS House of Delegates has requested each component County Medical Society to poll its members to determine their stand on Social Security—compulsory or voluntary. It is very important that you signify your opinion about this vital issue.

Many of the younger men feel that Social Security (more properly known as Old Age and Survivors Insurance) as now set up is insurance to protect their families during the years when their income is comparatively small and no reserve has been provided.

Is Social Security "insurance"? Insurance has been defined as a contract where one undertakes to indemnify another against loss, damage, or liability arising from an unknown or contingent event. OASI is not insurance. There is no contract. The rate is subject to change, and the change will be upward because more is paid out than is taken in. There is no reserve.

A young man may buy better survivorship benefits for his widow and minor children by purchasing ordinary life insurance with "family income" clause. He may wish to add a mortgage protective policy which is relatively cheap. This contract is for a definite time and is enforceable in the courts.

Who benefits most from OASI? OASI is a windfall for the oldsters, the cost being handed over to the young men. It saddles the young generation with an enormous. unreasonable debt.

According to the Curtis Subcommittee of Social Security (83rd Congress)—quoting from pages 69 and 70 of this report: "As a group, today's aged on OASI will receive in benefits almost fifty times the amount they paid into OASI taxes." Isn't that fantastic?

Who will meet this debt—the old or the young?

President's



Message

W. D. Jones.

President, Michigan State Medical Society

are not permitted to provide retirement income before taxes are computed. We have invited attention to this unfair tax arrangement for over ten years, and have suggested an equalization. Several bills have been introduced in later years. Just at present, there are two in the House of Representatives, HR. 9 and 10, which would accomplish our purpose. We understand these bills, Jenkins-Keough, have received much favorable consideration from the American Bar Association, the American Medical Association, and numerous others sponsoring them. We should very actively support them. We are not asking any favor which has not for years been available to our friends in industry. We ask only our right to provide for our own future before taxes, as is now done in industry.

Social Security
(Old Age and Survivors Insurance)

Secretary Folsom announces, "Social Security should be extended to all those who are not now included." The medical profession is about the only group still excluded. Several times the President has stated he would like to include us but to date the exclusion stands.

One amendment to the Social Security program, H.R. 7225, was brought up in the House of Representatives and passed without a hearing, with debate limited to thirty-five minutes and no amendments allowed. Any bill affecting the whole population, as this one does, is entitled to full consideration. This bill was discussed last month. It provides allowances for permanently disabled persons after fifty years of age; benefits for certain disabled children after eighteen; it allows women to participate in benefits after age sixty-three instead of sixty-five; *and sets up a federally selected and paid medical service* to determine the degree and permanence of disability.

The American Medical Association, by its House of Delegates and its Board of Trustees, has entered strict opposition to this bill which has passed the House and is now in committee in the Senate. We have objected to the methods of medical determination of disability. The whole profession and every thinking citizen abhors the methods of this legislative accomplishment. We fear the effects of such continued extension of the Social Security program. Secretary Folsom, himself, cautioned, "We should remember there is a limit to the Social Security taxes the people may be willing to support."

The Social Security (OASI) program has its opponents who demanded a re-evaluation because of its non-economic status. The program grew out of great distress during the depression years. It was called "insurance" but is simply another wage tax on the first earnings up to the present level of $4,200 a year. Promises and obligations have built up during its nineteen years which cannot be avoided. The program must be accepted but it also must be made solvent.

We still believe a good purpose would be served by a repeal of Sections 106 and 222 of the Public Law 761 of the 83rd Congress, which contains the methods of medical activity in determining extent and permanence of disability. These are steps toward government medicine.

MICHIGAN MEDICAL SERVICE

CRITICISM has been made many times and in many states that the voluntary medical prepayment plans are primarily surgical plans and that the medical men receive very little, if any, benefit. We have heard that again recently and have checked. The reason given is that the members on the Boards of Trustees are almost all surgical men.

It is true that the coverage of the plans was at first all surgery. That was absolutely true in Michigan. Michigan's first policies were with the Ford Motor Company employes. The company was starting a service for its employes, taking out one dollar a month from their pay and buying as many benefits as possible. They had a contract with the Michigan Hospital Service for hospitalization charges, for which they were to pay $0.60 per month. Michigan Medical Service was asked if it could give surgical service for the $0.40 left. It was decided to give in-hospital surgical services. The first month, March, 1940, started with 27,838 subscribers; by August the number had increased to 67,449. This was a limited policy of only surgery in the hospital. For about two years, MMS also sold an all-inclusive home, office, hospital service but almost went broke and cancelled it. The $5,000 limit contract, which provided for medical care in the hospital in addition to the surgical, was established in 1950.

The total enrollment, as of June 30, 1955, in the $2,500 contract was: surgical, 1,380,610; medical-surgical, 1,489,859. In the $5,000 contract, it was: surgical, 21,084 and medical-surgical, 425,891. Of the total membership, 57.4 per cent now carry in-

hospital medical insurance in addition to the surgical.

MMS, in 1954, paid for medical (non-surgical) services the sum of $3,485,732.52. In the first six months of this year, it paid $2,121,837.84, not a cent of which goes to surgeons. The total medical surgical benefits rendered in 1954 amounted to $27,804,044.61. One-eighth of all the services rendered were medical. Integrating these results indicate that in the medical-surgical group over one quarter of the payments were for medical services. Probably that proportion holds in all practices.

Michigan Medical Service's Board of Directors of 1955 consists of eleven laymen, ten surgeons, and thirteen medical men. Dr. Novy, President for thirteen years, is a cardiologist. There has been a complete, fair distribution on the board. It was so elected by the House of Delegates.

ECONOMIC MEDICINE

ECONOMIC trends now facing the medical profession have grave forebodings. Time never turns back but conditions and responsibilities surely do. The American people were never in a more prosperous situation. Total income, total production, and ever better facilities are so constantly with us that we forget the not too distant past. In the late 1920's, everybody believed the war economy had passed and that good times were surely here. But look what our history book and our memories tell us.

How many of our members can remember intimately those times? Approximately 50 per cent of our present practicing physicians came into active service since the end of the great depression or at the beginning of the second World War. Of this half of our members we ask "can you imagine what the practice of medicine would be without health insurance, hospital or medical-surgical?"

Picture an economic level where the average income of 85 per cent of our people was under $2,500 a year. We had just passed several years of the worst "depression" and the longest in the history of the United States. For a period, all of our banks had been closed—many never reopened and many of our industrial plants succumbed. Some of our friends and neighbors had jobs and steady work, but far too many had scant security in those jobs.

The "depression" had passed through the stage where the federal government entered and practically took over the relief problem from the local and state government. For able-bodied men with no work, jobs were created. Some schools and roads were built. After they were done, men were put to shoveling dirt, cracking stones, raking dirt, and raking it back—any task that would use muscles, keep large gangs occupied, and give an excuse to pay the laborer $16.00 a week—this to countless millions of them.

Sixteen dollars was established as the weekly wage need for a man to care for his family. Medical and hospital service, if needed, was provided by a bureaucracy of the government which sent the patients around and paid very mediocre fees after very close scrutiny to avoid chiseling. They furnished lists of drugs which we could prescribe. More than 40 per cent of the physician's income came from this government relief. Government payment for medical services was ridiculous—and to hospitals—at the most, $3.50 a day. Most hospitals were beneficiaries of our Community Chests. The men with steady work and those with good jobs were the envy of all others.

Two Results

During any great stress, some solution is bound to come from unexpected sources. Two economic developments came from that time of the "thirties." Demands for sharing the limited work opportunities were insistent. Primarily, labor organizations sought jobs, and the idea of making people retire at age sixty-five became dominant. Many workers had observed a retirement age of seventy, especially the teaching profession and the railroad workers. The concept was to replace older workers with younger men and move the whole line up one notch. The older man being replaced needed some security, and the Social Security (misnamed Old Age and Survivors Insurance) provided a very small monthly income for the man who lost his job because he was sixty-five. In 1935, when this law was enacted, the pittances allowed ($15.00) were worth proportionately more than they are now. Such was part of the stimulus for Social Security. It spread rapidly to most labor, most employed people and the professions, except the physicians who chose to remain their own insurers. We have considered this problem at length many times.

Non-profit voluntary health plans were the other great accomplishment of this same period of stress. Most of our patients (85 per cent) were having great difficulty in securing, and far greater diffi-

culty in paying for, medical or hospital care during those years.

The time was ripe. Stresses of the era demanded relief. A solution must come and did. From many places throughout the nation doctors and hospitals set about to solve their own problems. Labor leaders and many political leaders sought solution in the manner devised so many years ago by Bismarck, and later by so many other European nations, not to forget the Soviet. Socialized medicine was proposed. For many years we fought the Wagner-Murray-Dingell bills, not forgetting the last two administrations which almost succeeded in socializing the whole medical profession.

In Washington, Oregon, and Texas, a few county medical organizations were successful in starting small groups of prepaid medical and hospital service. Michigan, through the efforts of the State Medical Society and its Committee on Survey of Medical Services and Health Agencies and through its 1933 report to the House of Delegates, had made some suggestions which were being activated by three different county medical societies, one of which had a plan ready to sell.

Through another committee and later through the efforts of the MSMS Executive Committee of th Council, the plan now known as Blue Shield was evolved and, after securing enabling legislation, was launched. The present Michigan Hospital Service was formulated by the hospitals of the state, the Michigan Hospital Association, and through the efforts in Lansing of representatives of the Michigan State Medical Society and was started in business in March, 1939. Michigan Medical Service followed a year later, with many misgivings but with the indomitable persistance of its incorporators, a group of physicians representing the Michigan State Medical Society.

Medical Care plans are not insurance. They are another method of more adequately providing and selling medical care to large or small groups who desire security in the knowledge that such care is always available. The plans are creatures of our own genious, devised primarily to relieve our contract-holders of catastrophic medical expenses, by our own GUARANTEE OF SERVICE. Participation of about 90 per cent of our members was necessary to convince the state authorities of our ability to render the services promised.

Our Blue Cross-Blue Shield are not just two more insurance companies which have money and can expect to pay large bills for our patients. Some doctors and subscribers seem to have that idea. How often do we hear, "You (or I) have insurance, why not go into the hospital and use it." And how often are many unnecessary services ordered because someone else pays.

Remember, our subscribers and our physicians are the agency assuring service. Every unnecessary service or extra hospital day actually comes out of our own pockets in increased costs of premiums.

BLUE CROSS RATE INCREASE

IN November 22, 1955, Michigan Hospital Service, the Michigan Blue Cross, petitioned the State Insurance Commissioner for permission to increase premium rates 23 per cent. Under the law, this procedure is necessary, and the Commissioner, if he is satisfied the increase is justifiable to preserve the solvency of the corporation, must grant permission. Costs of hospital services and the more frequent utilization are the responsible factors.

On November 23, 1956, Ford (Local 600) UAW-CIO protested to the Governor and demanded an investigation. We now quote from *Ford Facts,* official publication of Ford Local 600, (62,000 circulation):

"Since the Board of Directors which requested the Blue Cross rate increase is composed mainly of doctors and administrators of hospitals, and since such individuals and institutions will benefit directly as a result of proposed rate increases, we are of the opinion that the scope of the investigation we requested should not be concerned only with the question of increased costs of such individuals and institutions, but should delve into the question of whether the increased costs are in themselves justified."

We reported last month that, in 1949, personnel costs were $13.59 out of a total cost of $19.96 per hospital day—this represents 68 per cent of costs. In 1954, these costs had increased to $20.38 for personnel out of a total of $27.88 (73 per cent). One of the prime costs of a hospital is labor. There are twenty-one hospital representatives on the Board of Trustees of Michigan Hospital Service, six who represent the Michigan State Medical Society and fourteen who represent the public. Of the latter, two are CIO union labor representatives, one being Executive Director for Walter Reuther. Labor is represented. We

continue to quote resolutions sent to state and federal officers:

"WHEREAS, the health of all individuals in the nation should be of vital concern to all, and

"WHEREAS, in an attempt to insure the health of the nation, private hospital, surgical and medical insurance is necessary because of the lack of and overall government program securing the health of citizens; and

"WHEREAS, the services rendered by Blue Cross and Blue Shield have not increased in comparison with the premium rate increase which already amounts to approximately 100 per cent since 1948 and

"RESOLVED, that we go on record against such an increase and demand a complete investigation of Blue Cross and Blue Shield by either the State of Michigan or the United States Government; be it

"RESOLVED FURTHER that we demand of our representatives in Congress and the State Legislature to intensively press for state and national legislation which will afford all with proper overall medical care without cost to the individual;"

Michigan Medical Service has had no premium rate increase of its $2,500 policy for ten years. The $5,000 rate is as first established.

We are frequently cautioned by our members that the threat of socialized medicine is a thing of the past. It is just as threatening as ever, perhaps even more.

JOURNAL RATED AMONG HIGHEST ELEVEN

ON November 7 and 8, 1955, the State Journal Advertising Bureau of the American Medical Association held a conference in Chicago.

One of the items presented at the Conference was an evaluation of the various medical journals serviced by the Advertising Bureau. Our Michigan JOURNAL was rated 87.8, among the eleven highest in the country. No Journal was rated over 90. The eight points of consideration were format, cover, table of contents, body type and column treatment, heads, blurbs and subheads, illustrations, captions and boxes, layouts, paper, ink, presswork and engravings.

Beginning with the January issue of THE JOURNAL, there have been a few changes made which were suggested as a means of improving the appearance of our JOURNAL. The headings of the articles extend over two columns instead of one as done previously. Also a larger space is left between the columns than before. This arrangement not only adds to the attractiveness of the page, but also allows for easier reading.

We are all very proud that our publication is in the upper brackets, and we shall continue to seek ways of improving it even more.

NEW COUNCILOR

WALTER S. Stinson, M.D., Bay City, has been elected to succeed Fred H. Drummond, M.D., Kawkawlin, as Councilor. He was born in 1901, attended Western Michigan College in Kalamazoo for his pre-medical work and received his M.D. degree from the University of Michigan Medical School in 1929. He interned at Grace Hospital in Detroit and was on the staff at Henry Ford Hospital in Detroit for two years before he started his practice in Bay City in 1932.



W. S. STINSON, M.D.

In 1944, he was Chief of Staff at General Hospital, Bay City; in 1946, Chief of Staff at Mercy Hospital, Bay City.

From 1948 to 1954, he has been a member of the House of Delegates and is at the present time President of the Bay, Arenac and Iosco Counties Medical Society. Since 1945, he has been chairman of the Board of Directors of the Allen Medical Building Corporation. He is a member of the County and State Medical Societies and a member of the Academy of General Practice.

He is married and has two daughters, both in the field of education.

HARD-OF-HEARING PATIENTS

(Continued from Page 72)

can provide a continuing service by referring the patient by letter to the Michigan Association for Better Hearing, 408 Hollister Bldg., Lansing 8, suggesting the services needed. The Michigan Association will immediately write the patient, with a carbon copy to the doctor, providing current information about available facilities in or near his home community, and, if necessary, will attempt to motivate the patient to take advantage of such services.

H. Marvin Pollard, M.D.

Gastroenterology with Imperturbability

The Chief of Medicine at University of Michigan Medical School, Cyrus C. Sturgis, M.D., has a revealing little comment involving H. Marvin Pollard, M.D., which he recalls on occasion.

For Dr. Sturgis, punctuality (as reported in a previous issue of THE JOURNAL) is nearly as important as accurate diagnosis. When Dr. Pollard, now his associate and Professor of Internal Medicine, was one of Dr. Sturgis' students and ward rounds had been scheduled for 8:00 A.M. at University Hospital, the Chief always managed to be on deck a few minutes early. He would look up and down the corridor somewhat anxiously for Pollard to arrive. Pollard always arrived, but seldom, if ever, a second before the precise time.



The Chief would look at the student icily, and then, probably because he had no excuse for anger, Sturgis would say to Pollard, "I am glad to see you, Dr. Pollard! Are you now up for the day?"

One cannot attach deep metaphysical significance to such an ancedote, yet there is meaning there of a revealing sort. Dr. Pollard, whose academic and professional accomplishments are quite a matter of record, seldom gets wherever he is supposed to be much before he is supposed to be there. But his arrival inevitably is the signal for a rather amazing amount of achievement.

Just to list a few: Governor for the State of Michigan of the American College of Physicians; Secretary of the American Gastroenterological Association; Past President of the American Gastroscopic Society; Executive Vice President of the Michigan division of the American Cancer Society; and, now, Secretary-General of the International Congress of Gastroenterologists.

You can't sleep through a morning and accomplish all that, and Dr. Sturgis knows it. The truth is, the Chief has been known to speak rather glowingly of his former student.

For Dr. H. Marvin Pollard, pressure is something you cook vegetables with. Nothing else. It is quite fitting, in fact, that Pollard, an internationally recognized gastroenterologist, says, "A man's best friend can be his stomach." Or, he adds, "Your worst enemy, if you let it."

Dr. Pollard never lets it. He practices, he teaches, and he travels all over the country. He does it with such enviable ease and fruitfulness that one wonders where the secret lies.

One of his associates said recently, "Dr. Pollard has the talent for determining what is important and what is unimportant. Then," added the associate, "he manages in an almost mysterious way to accomplish the important tasks with grace and skill."

The same associate went on, this time relating an incident involving Dr. Pollard when he was asked in as consultant in a baffling case of Addison's disease. The patient was a young girl whose condition had been diagnosed by her family physician as hepatitis. Cortisone had been prescribed, and she apparently recovered.

Several weeks later, the child had a relapse and was brought to the University Hospital. Cortisone was resumed successfully, but one of Dr. Pollard's associates suggested that the child had Addison's disease, not hepatitis.

A conference followed, and Pollard agreed on Addison's. At the next meeting with the child's parents, Dr. Pollard said, "Your child is doing

nicely on cortisone, but I want you to know that I made a mistake the first time by agreeing that she had hepatitis." Dr. Pollard concluded, "Your child has a glandular condition, but she will be all right."

As the story goes, the child's parents looked at Dr. Pollard somewhat blankly at first, but then changed to an attitude of deep appreciation. To this day, the family continues to see Dr. Pollard, and they are completely devoted patients.

The point of the story, beyond illustrating the doctor's need for complete professional integrity, is somewhat ironic. When Pollard had first been called into the case, he made some notes and then proceeded to stick them in his pocket. On the notes Pollard had written, "Addison's?"

It was not until some time after the child's relapse and admission to University Hospital that Dr. Pollard's first observation became known.

There is a great deal more to be said about Dr. Pollard; to wit, a capacity for breaking out in ripe baritone among friends; a somewhat more studied hobby, photography; his growing influence in the field of international medicine; and his easy, epicurean view of life.

From the Colorodan son of a cabinet maker whose early life was modest and simple to the Michigan man of medicine whose career has become widely recognized, Dr. H. Marvin Pollard cuts an imposing figure of success and accomplishment.

"All you have to say about Pollard," comments his close friend, Arthur C. Curtis, M.D., "is that a lot of people envy him for the amount of good medicine he gets done with so little personal intestinal turmoil."

That, after all, is probably the way a gastroenterologist should be.

LOUIS GRAFF

PROBLEMS OF MEDICAL EDUCATION

(Continued from Page 79)

never heard him mention the word "ethics," but in presenting the names of great men in medicine, and their ideals, he gives the students somthing to emulate. He makes them realize that the great men of medicine have practiced good medical ethics, and that they are expected to live up to similar high standards of practice.

SPEAKER LIVESAY: This final question, with your permission, I am going to reword slightly, and ask Dr. Whitaker: *"Do you think that the doctor in a home community, as an example, is the primary reason influencing a student to choose medicine as a career?"*

DR. WHITAKER: At the time of the personal interview for admission to medical school, interviewers for a long time have asked the question, "Why do you want to be a doctor?"

Personally, I have tried to avoid that question because I usually receive the same answer, "I am interested in science, and I like to help people."

If I happen to ask the question, "Give me some examples of helping people," I may embarrass the applicant; so I often avoid it.

Yet, nearly always in the autobiographical sketch, or in the conversational interview, the student speaks up and says, "I first became interested in medicine when I had my tonsils removed," or "when my little brother had his broken arm set" or "when the doctor was called for my grandmother, and I began to know that doctor, and I realized what he was doing, and I wanted to be like him." That reason probably shows up more than anything else as the basic cause for that boy or girl wanting to be a physician.

SPEAKER LIVESAY: Thank you very much, gentlemen. I would like on behalf of the House of Delegates to thank Dr. Furstenberg, Dr. Scott and Dr. Whitaker for their presentation, and more especially for taking time out of their busy lives to come to this House of Delegates and present this excellent discussion. *(Applause)*

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

CURRENT PROCEDURES FOR THE SUBMISSION OF SPECIMENS FOR TPI TESTING

The Public Health Service has recently made the TPI test available through the Venereal Disease Research Laboratory for the study by serological procedures of problem cases in the diagnosis of syphilis. In order to insure a specimen which will be satisfactory to the laboratory, the following guide should be followed:

Criteria for Acceptance

Specimens from patients in the following categories will be accepted:

1. Diagnostic problem cases with no history or clinical evidence of syphilis.
2. Patients with suggestive evidence of syphilitic infection who have not received treatment.
 If the patient has received any injected antibiotics within one (1) month, or oral antibiotics within one (1) week, of the drawing of the blood specimen, an invalid or inclusive finding in the TPI test may result.

Clinical History Form

Fill out the attached clinical history form and submit with the specimen in the same mailing container. Specimens received without the completed history form will not be tested.

Collection of the Blood Specimen

1. Collect at least 5 ml of blood with a sterile syringe and needle.
2. Transfer blood to a sterile tube and stopper with a *paraffin-coated cork. Uncoated corks or rubber stoppers are unsatisfactory.*
 NOTE: Blood may be collected directly into a vacuum-type tube such as the B-D Vacutainer or the Sheppard Vacuum tube, provided the rubber stopper is replaced with a paraffin-coated cork *immediately after collection.*
3. Secure the stopper in the tube with adhesive tape.
4. Place blood specimen in a mailing container with the completed clinical history form and mail immediately to the State Public Health Laboratory.

Preparation of the Sterile Serum Sample

1. The State Public Health Laboratory will aseptically separate and transfer the serum to a sterile tube stoppered with a paraffin-coated cork. Bacterial contamination will render the serum unsatisfactory for testing.
2. The sterile serum sample and the clinical history form will then be forwarded immediately, *in the same mailing container,* to the Venereal Disease Research Laboartory, Division of Special Health Services, P.O. Box 185, Chamblee, Georgia.

Reporting of Results

Test results will be reported to the State Public Health Laboratory for forwarding to the submitting physician.

The special containers, history forms and directions for submission of the specimens may be obtained from the Division of Laboratories, Michigan Department of Health, Lansing 4, Michigan.

CHARLES BEHNEY JOINS DEPARTMENT STAFF

Charles A. Behney, M.D., joined the staff of the Maternal and Child Health Section of the Michigan Department of Health as maternal health consultant on October 17, 1955.

Dr. Behney has had extensive experience in the private practice of obstetrics and gynecology and in teaching in the Department of Obstetrics and Gynecology, School of Medicine, University of Pennsylvania. He is the author of numerous articles on Obstetrics and Gynecology and is a member of leading obstetrical and gynecological organizations including the American Board of Obstetrics and Gynecology and the American Gynecological Travel Club. He is also a member of the American College of Surgeons.

During the past two years, Dr. Behney has carried on a program of postgraduate education in obstetrics under the auspices of the Tennessee State Medical Association.

When you are suspicious of the presence of stomach cancer, check the stools for occult blood.

* * *

Gastric analysis is seldom of diagnostic value in early cases.

* * *

Any patient in whom there exists even a question of a gastric malignancy should have complete x-ray studies.

* * *

Often the first sign of Hodgkin's disease is painless enlargement of a cervical node, which may be the only clinical manifestation for months.

* * *

Elevated serum phosphatase often indicates bone involvement in Hodgkin's disease.

* * *

Any chronic ulcer or induration of the mouth should be watched for not more than one week; further delay is unjustified.

* * *

Thorough oral examinations and constant vigilance by both dentists and physicians can reduce deaths from mouth cancer to a rarity.

* * *

All personnel in radiation laboratories who are exposed to as much as one-third of one roentgen a week should wear film badges in their work.

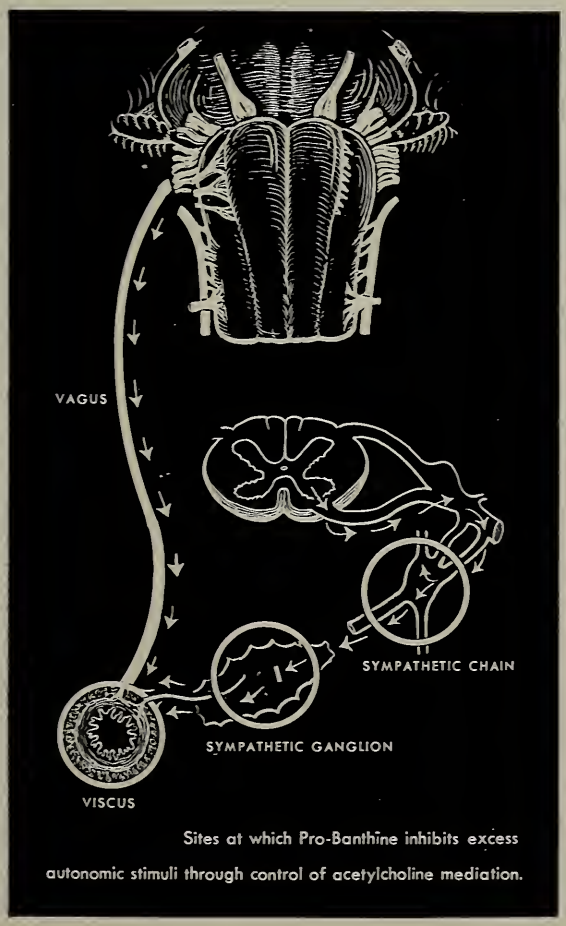
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Pro-Banthine (β-diisopropylaminoethyl xanthene-9-carboxylate methobromide, brand of propantheline bromide) is available in three dosage forms: sugar-coated tablets of 15 mg.; sugar-coated tablets of 15 mg. of Pro-Banthine with 15 mg. of phenobarbital, for use when anxiety and tension are complicating factors; ampuls of 30 mg., for more rapid effects and in instances when oral medication is impractical or impossible.

For the average patient one tablet of Pro-Banthine (15 mg.) with each meal and two tablets (30 mg.) at bedtime will be adequate. G. D. Searle & Co., Research in the Service of Medicine.

1. Schwartz I. R.; Lehman, E.; Ostrove, R., and Seibel, J. M.: Gastroenterology *25*:416 (Nov.) 1953.

2. Roback, R. A., and Beal, J. M.: Gastroenterology *25*:24 (Sept.) 1953.

Clinical trial packages of Pro-Banthine and the new booklet, "Case Histories of Anticholinergic Action," are available on request to . . .

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NEWS MEDICAL

MICHIGAN AUTHORS

M. James Warden, M.D., Joseph L. Posch, M.D., Detroit, are the authors of an article, entitled "The Treatment of Burns in Infants and Children," published in *Harper Hospital Bulletin,* September-October, 1955.

Edmond L. Cooper, M.D., and **Gomer P. Evans, M.D.,** Detroit, are the authors of an article entitled "A Plea for the Early Treatment of Strabismus," published in *Harper Hospital Bulletin,* September-October, 1955.

A. D. Ruedemann, Jr., M.D., Detroit, is the author of an article, entitled "Importance of Early Investigation and Treatment of So-Called Ocular Muscle Imbalance," presented at the annual meeting of the American Academy of Pediatrics, Detroit, April, 1955, and published in *Harper Hospital Bulletin,* September-October, 1955.

Thomas Clark Johnston, M.D., Detroit, is the author of an article, entitled "Nephrotomography," published in *Harper Hospital Bulletin,* September-October, 1955.

Thomas H. Miller, M.D., and **Coleman Mopper, M.D.,** Detroit, are the authors of an article, entitled "Lichen Myxedematosus," published in the *Harper Hospital Bulletin,* September-October, 1955.

Robert K. Abraham, M.D., and **Herbert H. Burnett, M.S.,** Detroit, are the authors of an article, entitled "Tetracycline and Chloramphenicol Studies on Rabbit and Human Eyes," published in *AMA Archives of Ophthalmology,* November, 1955.

Harold Falls, M.D., Jean Jackson, M.D., J. H. Carey, M.D., John G. Rukavina, M.D., and **Walter D. Block, Ph.D.,** Ann Arbor, are the authors of an article, entitled "Ocular Manifestations of Hereditary Primary Systemic Amyloidosis," published in the AMA *Archives of Ophthalmology,* November, 1955.

D. Emerick Szilagyi, M.D., Roger F. Smith, M.D., and **Paul R. Overhulse, M.D.,** Detroit, are the authors of an article, entitled "Resectional Surgery of the Abdominal Aorta," published in AMA *Archives of Surgery,* October, 1955. This paper was read at the twelfth annual meeting of the Central Surgical Association, Chicago, February 18, 1955.

James Barron, M.D., and **Laurence S. Fallis, M.D.,** Detroit, are the authors of an article, entitled "The Noble Plication Operation for Chronic Recurring Intestinal Obstruction," read at the thirteenth annual meeting of the Central Surgical Association, Chicago, February 19, 1955, and published in the AMA *Archives of Surgery,* October, 1955.

J. M. Hammer, M.D., and **P. H. Seay, Ph.D.,** Kalamazoo, and **E. J. Hill, M.D., F. W. Prust, M.D.,** and **R. B. Campbell, M.D.,** Detroit, are the authors of an article, entitled "Intestinal Segments as Internal Pedicle Grafts," published in the AMA *Archives of Surgery,* October, 1955.

Milton Bryant, M.D., and **Herbert Sloan, M.D.,** Ann Arbor, are the authors of an article, entitled "Experimental Use of Lyophilized Aortic Homografts in the Dog," published in the *University of Michigan Medical Bulletin,* September, 1955.

John M. Whitney, M.D., Battle Creek, is the author of an article, entitled "Civil Defense, Medical Aspects from the Federal Standpoint," published in *California Medicine,* October, 1955.

R. J. Dittrich, M.D., Iron Mountain, is the author of an article, entitled "The Latissimus Dorsi Syndrome," published in the *Ohio State Medical Journal,* October, 1955.

J. S. DeTar, M.D., Milan, is the author of an article, entitled "Family Physicians, Quo Vadis," published in the *Current Medical Digest,* October, 1955.

Harold A. Ott, M.D., Royal Oak, is the author of an article, entitled "Foibles and Pitfalls in Obstetric Hemorrhage," presented at the 102nd annual meeting of the Minnesota State Medical Association, Minneapolis, May 24, 1955, and published in *Minnesota Medicine,* October, 1955.

John E. Orebaugh, M.D., Frederick A. Coller, M.D., Ann Arbor, are the authors of an article, entitled "Indications for Splenectomy," published in *Surgery,* a condensation of which appears in *American Practitioner and Digest of Treatment,* October, 1955.

David J. Sandweiss, M.D., and **Harold Fulton, M.D.,** Detroit, are the authors of an article, entitled "Intravenous Cholangiography, Results in One Hundred Cholecystectomized Patients with Upper Adbominal Symptoms."

Thomas Francis, Jr., Ann Arbor, is the author of an article, entitled "Evaluation of the 1954 Poliomyelitis Vaccine Field Trial; Further Studies of Results Determining the Effectiveness of Poliomyelitis Vaccine (Salk) in Preventing Paralytic Poliomyelitis," published in *The Journal of the American Medical Association,* August 6, 1955.

J. W. Rae, M.D., and **G. H. Koepke, M.D.,** Ann Arbor, are the authors of an article, entitled "Rehabilitation of the Poliomyelitis Respirator Patient," published in the *University of Michigan Medical Bulletin,* June, 1955.

J. Edward Berk, M.D., D.Sc., Detroit, is the author of an article, entitled "Diagnostic Features of Pancreatic Disease," read before the Eighth Clinical Meeting of the American Medical Association, Miami, Florida, December 1, 1954, and published in *The Journal of the American Medical Association,* November 12, 1955.

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(Continued from Page 90)

Lawrence Reynolds, M.D., and **Harold Fulton, M.D.,** Detroit, are authors of an original article, "Oral Cholecystography With Iopanoic Acid (Telepaque)," which appeared in JAMA of December 3, 1955.

W. S. Reveno, M.D., Lawrence Reynolds, M.D., and **F. D. Dodrill, M.D.,** Detroit, are authors of an article in Clinical Notes of JAMA of November 19, entitled "Occlusion of Both Innominate Veins."

J. E. Berk, M.D., Detroit, is the author of an original article which appeared in JAMA of November 12, entitled "Diagnostic Features of Pancreatic Disease."

D. J. Sandweiss, M.D., and **Harold Fulton, M.D.,** Detroit, are authors of an original article which appeared in JAMA of November 5, entitled "Intravenous Cholangiography."

J. H. Ahronheim, M.D., Jackson, is the author of an original article, "The Dynamics of Neoplasia," which was published in the *Mississippi Valley Medical Journal,* September, 1955.

Clifford D. Benson, M.D., Detroit, is author of an original article, "Resection and Primary Anastomosis of the Jejunum and Ileum in the Newborn," which was originally published in *Annals of Surgery,* September, 1955.

* * *

George Rieveschl, Jr., Ph.D., Scientific Assistant to the President of Parke, Davis & Company, Detroit, has been honored by being selected as a "Fellow of the Academy" of the New York Academy of Sciences.

* * *

The Blue Water Chapter, American Academy of General Practice, was formed in Port Huron recently. William H. Boughner, M.D., of Algonac, was named President; Claud A. Ludwig, M.D., Port Huron, was chosen as President-Elect; and Phillip R. Turner, M.D., of Harbor Beach was selected as Secretary-Treasurer. The charter of the Blue Water District was presented by Russell F. Fenton, M.D., Detroit, President of the Michigan Academy.

* * *

Hawaii Centennial.—Treat yourself to a week or two in Hawaii in the springtime, why don't you?

That's an invitation it's a pleasure to pass along. It comes from the Hawaii Medical Association, whose members are celebrating their organization's hundredth anniversary this coming April 22 to 29 in proper "Hawaii" as well as medical fashion. There will be a short but worthwhile professional program on Monday and Tuesday mornings, a spectacular Centennial Celebration Pageant Tuesday night, and a traditional *luau* (Hawaiian feast, to you Easterners) Thursday night, with Polynesian entertainment.

This is the best time of the year to visit America's island paradise—clear, balmy days and cool, refreshing nights; spring flowers in profusion on the ground and in the trees; lovely island—but you have the idea now, surely. Hawaii in the spring is always the greatest, and this is your chance to tie it into a pro-

(Continued on Page 94)

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(Continued from Page 92)

fessional meeting. It follows the American College of Physicians' session in Los Angeles, too. Write the Hawaii Medical Association, 510 South Beretania Street, Honoloulu 13, Hawaii, for reservations application forms.

* * *

The American Goiter Association will have its annual meeting at the Drake Hotel in Chicago on May 3, 4, and 5, 1956. This meeting is open to the general medical profession.

* * *

The Fifth Congress of the Pan-American Medical Women's Alliance will be held in Santiago and Vina del Mar, Chile, March 6 to 13, 1956. A pre-Congress and post-Congress trip is planned to include visits to hospitals and medical clinics in Mexico, San Salvador, Panama, and Peru. A week's trip pre-Congress is planned in the lake region of southern Chile under the guidance of some of the Chilean women doctors. Following the Congress, a week will be spent in La Paz, Bolivia, visiting their medical projects among the Incas. En route to Lima, there will be a trip across Lake Titacaca and ample opportunity to explore the archeologic treasures of Cuzco and Macchu Picchu. Arrangements may be made to shorten or lengthen the planned itinerary. Papers on the following subjects will be presented:

Medical Problems of Women in Medicine, Infertility, Family Security, Cancer, Miscellaneous Subjects.

Information may be obtained from the Secretary, Dr. Eva F. Dodge, 2124 West 11th Street, Little Rock, Arkansas, or from the Program Chairman, Dr. Eva Cutright, Wooster, Ohio.

* * *

A 1,027-page history entitled, "Medical Support of the Army Air Force in World War II," has just been completed by the Office of the Surgeon General, USAF.

This book, which required over ten years to compile, write, edit and print, tells how military medicine was propelled into a new dimension as it became airborne. It contains valuable reading for military and civilian planners concerned with manpower, and every doctor will gain new insight into how the talents of the medical profession are forged into the iron framework of command to meet a national emergency. At the same time, the volume is interesting general reading because the human element is never lost.

Each chapter is thoroughly documented, with footnotes at the end of every chapter for easy reference. The volume is well illustrated with charts, diagrams, and photographs and includes extensive tabular data. There is a detailed index.

A copy is available through the Government Printing Office, Washington 25, D. C.

* * *

The Sixth International Congress of Otolaryngology will be held in Washington, D. C., May 5 through 10, 1956. There will be four official languages: English,

(Continued on Page 96)

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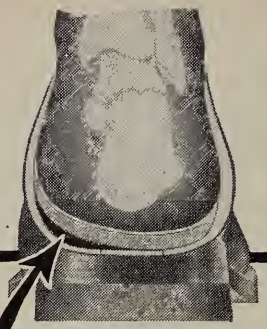
•

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SURGERY—Surgical Technic, two weeks, February 6, February 20
Surgical Anatomy and Clinical Surgery, two weeks, March 5
Surgery of Colon and Rectum, one week, February 27, April 9
General Surgery, one week, February 13, two weeks, April 23
Basic Principles in General Surgery, two weeks, April 9
Gallbladder Surgery, ten hours, April 9
Fractures and Traumatic Surgery, two weeks, March 12

GYNECOLOGY—Office and Operative Gynecology, two weeks, February 13, March 12
Vaginal Approach to Pelvic Surgery, one week, February 6, March 5

OBSTETRICS—General and Surgical Obstetrics, two weeks, February 27, March 26

MEDICINE—Internal Medicine, two weeks, May 7
Electrocardiography and Heart Disease, two week basic course, March 12
Gastroscopy, forty-hour course, March 19
Dermatology, two weeks, May 7

RADIOLOGY—Diagnostic X-Ray, two weeks, February 6, April 30
Clinical Use of Radioactive Iodine, one week, April 2
Clinical Uses of Radioisotopes, two weeks, May 7

PEDIATRICS—Intensive Review Course, two weeks, May 14
Neurological Diseases: Cerebral Palsy, two weeks, June 18

UROLOGY—Two-week Course, April 16
Cystoscopy, ten days, by appointment

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ADDRESS: REGISTRAR, 707 South Wood Street, Chicago 12, Illinois

(Continued from Page 94)

French, German, and Spanish. The subscription for members will be $25 which includes all privileges except the banquet.

The selected subjects of the conference are: (1) Chronic Suppuration of the Temporal Bone, (2) Collagen Disorders of the Respiratory Tract, and (3) Papilloma of the Larynx.

For further information, address Paul H. Holinger, M.D., 700 N. Michigan Avenue, Chicago 11, Ill., U.S.A.

* * *

Northwest Medicine, in its November, 1955, issue, carries an editorial entitled "Hypothyroidism" based on an article by N. Taylor, M. Teitelbaum and I. Tokuyama, entitled "Hypothyroidism, a Dangerous Disease" which was published in THE JOURNAL of the Michigan State Medical Society, September, 1955.

* * *

Charles P. Doyle, M.D., Lansing, at the October meeting of the Ingham County Medical Society, received a Service Citation for his many years of fine service to patients and for his contribution to the health and welfare of the general community. Dr. John Wellman, President-Elect, made it plain that the Society was proud to make this award to one of its senior members.

* * *

On March 8-10, 1956, the eleventh National Conference on Rural Health will be held at Portland, Oregon. There will be four sectional conferences, of which there will be one at Kalamazoo, Michigan, on January 19, 20, and 21.

* * *

Ernest Gardner, M.D., Detroit, of Wayne University's College of Medicine gave the Robert J. Terry Lecture, on December 6, 1955, at St. Louis, Missouri. The Terry Lecture, sponsored by the St. Louis County Medical Society is held annually in honor of Dr. Terry, Professor Emeritus at Washington University in St. Louis.

Dr. Gardner's topic, "The Nerve Supply of the Lumbosacral Region," dealt with low back pain, a common and difficult clinical problem, and some of the anatomical and physiological factors concerned in the production of back pain. This pain is often accompanied by spasm of back muscles, and in some instances the pain may be felt elsewhere, as in hip or thigh, even though the disorder does not involve these regions.

At present, Dr. Gardner is on leave of absence from Wayne's College of Medicine doing research at Stanford University. He will return in July.

* * *

International College of Surgeons.—Four regional meetings of the United States and Canadian Sections, International College of Surgeons, are scheduled for 1956.

The first, the Mid-Atlantic Region, meeting will be held at the Green Brier Hotel, White Sulphur Springs,

West Virginia, February 13-15, 1956. This will be followed by a meeting March 22-23 in San Jose, California. A southeastern regional meeting will be held in the Read House, Chattanooga, Tennessee, April 30-May 1, and a New England regional meeting in the Marshall House, York Harbor, Maine, over the July 4 weekend.

The largest gathering of surgeons of international renown is scheduled for Chicago, September 9-13, 1956. At that time, the 10th Congress of the International College of Surgeons will be held in conjunction with the 21st Congress of the United States and Canadian sections. Papers will be presented by physicians from all parts of the free world. Headquarters will be in the Palmer House. Four oral and four written examinations for Fellows in the United States Section of the International College of Surgeons will be conducted in 1956.

Further information may be had by writing to the Secretariat of the United States Section, International College of Surgeons, 1516 North Lake Shore Drive, Chicago 10, Ill.

* * *

Army Medical Reserve.—Seniors in approved American medical schools planning to enter the Medical Corps, Army Reserve after graduation next June can begin earning Reserve credits at once if they accept their commissions early this winter.

With the emphasis being placed now on Reserve service in today's defense blueprints, this is an important consideration the prospective physician may overlook if he postpones sending in his completed application form to the proper Army officials.

These application forms concern participation in the Armed Forces Reserve Medical Officer Commissioning and Residency Consideration Program now in operation. Under this program, evolved by the Department of Defense and the Selective Service System to insure the continuing supply of properly trained doctors for the nation, the medical senior may combine his military obligation and his intern and residency training. He may have up to three years in residency instruction in the medical specialties needed to safeguard the health of the fighting man.

Processing of commissions in the Medical Corps, Army Reserve, requires a minimum of two months and in some instances, a longer period. Consequently, the sooner the senior or the intern gets his papers in the hands of the processors, the earlier he will eliminate any uncertainty about his future plans for military duty and the possibility of any interference with his professional progress.

* * *

Tuberculosis can be prevented when suitable housing is available for all tuberculous families, says the Annual Report of the National Association for the Prevention of Tuberculosis (NAPT).

Overcrowding is the bugbear of the tuberculosis physician. Today, domestic overcrowding is less in England than ever before, and it has diminished even in

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Scotland, where conditions are worse. The percentage of households with over three persons per room is 4.7 in Glasgow, while in Liverpool it is 0.5, in Birmingham 0.4, and in Manchester 0.

Improved living conditions, regular mass x-ray examinations, BCG vaccination schemes—the way ahead is clear.

* * *

Lewis L. Strauss, chairman of the Atomic Energy Commission, has announced establishment of a twelve-member Advisory Committee of State Officials to consult with the Commission on regulations concerning health and safety aspects of private atomic energy activities.

The committee members represent state agencies such as health, labor, public utility and legal departments. Some are from states already doing work in radiation protection. Those who have been invited to serve include Albert E. Heustis, M.D., Commissioner of the Department of Health, Lansing, Michigan.

Decision to establish the advisory group is an outgrowth of a meeting of state representatives in Washington last July with the AEC to discuss proposed regulations on radiation protection being formulated for AEC licensees.

Close co-operation between the AEC and the states should help in attaining uniformity in regulations. Some states have already issued, or are about to issue, codes and regulations on radiation protection; others are doing preliminary work.

Working through the advisory committee, the Commission will keep informed of the needs of the states and will be better able to help states requesting technical guidance.

* * *

American Academy of General Practice.—About five thousand are expected to attend the Eighth Annual Academy of General Practice in Washington, D. C., on March 19, 22, 1956. Twenty-six outstanding speakers will discuss important subjects ranging from Cardiac Emergencies to Primary Wound Repair. There will be more than sixty scientific and 250 commercial exhibits. Highlights will be two live clinics, a symposium on obstetrics and an address by Surgeon General Leonard Scheele. Special tours have been arranged through the National Institute of Health at Bethesda, Maryland. The House of Delegates will meet at the Hotel Statler at 2:00 P.M., March 17, 1956. On Wednesday evening, John S. DeTar, M.D., of Milan, will be inducted as president. Various provisions are made for the doctors' wives.

* * *

At the Annual Meeting of the American Academy of Radiology in Chicago on February 10, 1956, Samuel W. Donaldson, M.D., of Ann Arbor, will be awarded the Gold Medal of the American Academy of Radiology, the highest honor of the national medical organization, in recognition of his outstanding contribution to this medical specialty.

Say you saw it in the Journal of the Michigan State Medical Society

The Michigan Society of Anesthesiologists, Inc., met in Grand Rapids on September 30, 1955, in conjunction with the State Medical Society. Dr. Frederick Van Bergen was guest speaker. He addressed the General Assembly on "The Role of the Anesthesiologist in the Care of The Polio Patient." He also spoke to the Anesthesia Section on "Hypercapnia." The business meeting with annual reports and election of officers was conducted; the following doctors being elected to serve for the coming year: President, Edward D. Connor, M.D., Birmingham; President-Elect, George Schneider, M.D., Grand Rapids; Secretary-Treasurer, D. W. Hesselschwerdt, M.D., Grosse Pointe.

Delegates elected are: W. G. Mackersie, M.D., Detroit; D. W. Hesselschwerdt, M.D., Grosse Pointe. Alternates are: F. E. Greifenstein, M.D., Detroit, and A. J. Hoffs, M.D., Grand Rapids.

* * *

The Eighth Annual Teaching Seminar of the International Academy of Proctology will be at The Drake, Chicago, Illinois, April 23 to 26, 1956. The International, National, and Local Program Committees are planning an unusual seminar on anorectal and colon surgery. There will be special emphasis on anorectal presentations, and on panel discussions, as requested by those who attended the New York meeting in 1955.

Eminent speakers from all parts of this country and abroad will present interesting papers and motion picture demonstrations of their personal techniques. Mexico is expected to be very well represented at this meeting.

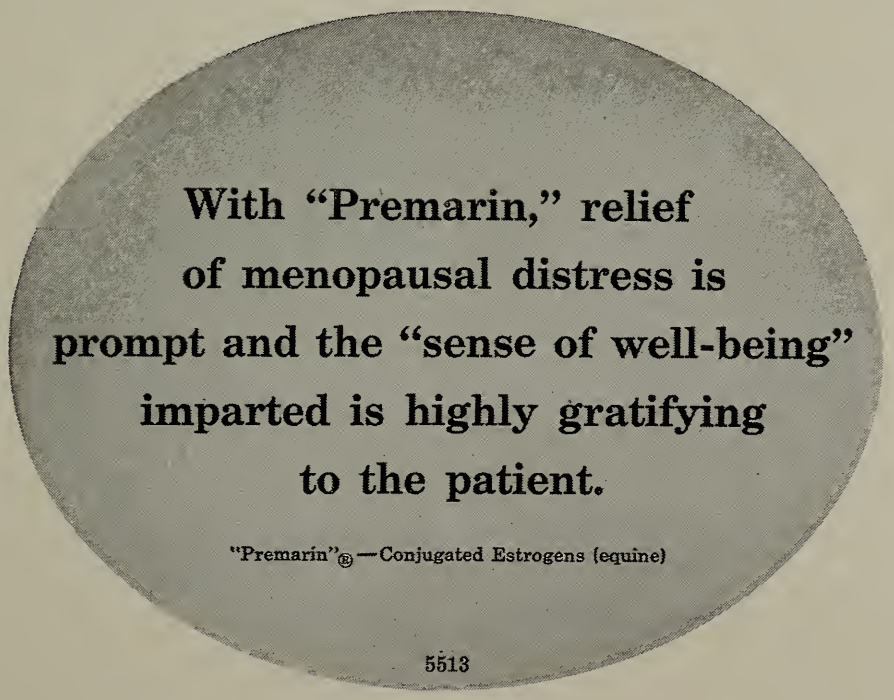
The Delegates and Trustees, and their wives, are cordially invited to cocktails and dinner on Sunday evening, April 22, 1956, the evening before the official opening of the scientific activities of the convention. Both members and non-members plan to attend the Thursday night, April 26 banquet. The Banquet Committee promises the best cocktails and hors d'oeuvres in Chicago (prepared by the masters of the Drake cuisine), and the finest dance music and entertainment for your pleasure.

The Women's Auxiliary has planned a very unusual program for the wives of the members and their guests.

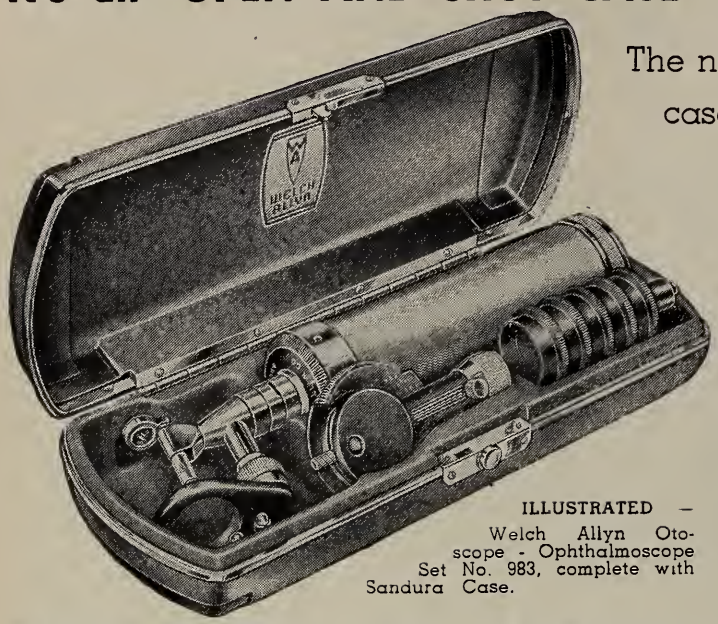
All physicians and their wives are cordially invited to attend the Annual Teaching Seminars of the International Academy of Proctology, whether or not they are affiliated with the Academy. There is no fee for attendance at these teaching sessions of the Academy.

* * *

The International College of Surgeons has established a Hall of Fame at 1615 Lake Shore Drive, Chicago. Rooms are assigned to forty countries in which the College has chapters. Ten oil paintings of famous Aus-



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ILLUSTRATED — Welch Allyn Otoscope - Ophthalmoscope Set No. 983, complete with Sandura Case.

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trian surgeons are hung on the Austrian room walls. A new 8 by 10 foot oil painting of twenty great Austrian surgeons, was hung November 30, 1955.

Life size sculptures of four of the thirteen most famous surgeons of all time have been placed in the Hall of Immortals: Imhotep, 700 B.C.; Hippocrates, 480 B.C.; Galen, 131 A.D.; and Ambrose Paré, 1310 A.D. To be completed will be Vesalius, Harvey, Pasteur, Morgagni, Semmelweis, Morton, Lister, Roentgen, and Mme. Curie.

Historical exhibits, oldest surgical instruments, manuscripts, paintings, sculptures, including Dr. and Mrs. Max Thorek's collection of hundreds of original manuscripts, letters, and papers are being received weekly.

* * *

American College of Surgeons.—A four-day sectional meeting of the College will be held at the Bellevue-Stratford, Philadelphia, February 13 through 16, 1956. All the hospitals are co-operating. A symposium on "Management of Mass Injuries" includes Robin C. Buerki, M.D., Detroit. Tommy M. Evans, M.D., Ann Arbor, will preside at a symposium on "Hermaphroditism and Pseudohermaphroditism." Albert C. Furstenberg, M.D., Ann Arbor, will give a paper "Diagnosis and Surgical Management of Parotid Tumors." Around 3,000 are expected to attend.

* * *

A new publication on ophthalmology is offered by Benjamin F. Boyd, M.D., Professor of Ophthalmology, University of Panama. Its purpose is to bring the most outstanding facts presented at the important Congresses of Ophthalmology, before the papers may have been printed. He has abstracted seven of the papers presented at the October meeting of the Academy of Ophthalmology and Otolaryngology in Chicago. The next number will cover the Pan American Congress in Santiago, Chile, January 9-14, 1956.

* * *

More about the 1955 MSMS Annual Session:

Forrest W. Larson, M.D., of Houghton: "We of the Houghton-Baraga-Keweenaw County Medical Society wish to take this opportunity to congratulate the Michigan State Medical Society on the excellent meeting and scientific program presented in Grand Rapids in September of this year.

"Dr. Paul Sloan, our delegate, and Dr. T. P. Wickliffe, our councilman from the 13th district, presented a very interesting and informative review of the business and scientific programs at our October meeting. Both were very enthusiastic and had many favorable comments on the meetings they attended.

"It is always a pleasure to attend such well-organized meetings. The scientific program, we feel, is unexcelled. Congratulations again for your fine work."

* * *

The Atlanta Graduate Medical Assembly will be held at the Atlanta Biltmore Hotel, Atlanta, Georgia, February 20-22, 1956. For program and full information, write Mark S. Dougherty, M.D., 15 Peachtree Place, N.W., Atlanta, Georgia.

Say you saw it in the Journal of the Michigan State Medical Society



The 11th National Conference on Rural Health, sponsored by the American Medical Association, will be held in Portland, Oregon, March 8-10, 1956.

* * *

The Sixth International Congress of Otolaryngology will be held in Washington, D. C., May 5-10, 1956.

* * *

The American Hospital Association recently broke ground for its new seventeen-story headquarters building being erected at Lake Shore Drive and Pearson Street on a site made available by Northwestern University. The new structure, to be completed by June, 1957, will cost $4,850,000 and will house the AHA and a number of allied groups.

* * *

Prize Winners.—Members of the Kent County Medical Society will hear a prominent guest speaker sometime during 1956 as a special prize for having the highest percentage of attendance at the 1955 MSMS Annual Session. This speaker of their choice will be brought from any part of the United States or Canada, at the expense of the Michigan State Medical Society.

The attendance at the 1955 Annual Session broke all previous records for Grand Rapids. The contest among Michigan's component societies proved to be an important factor in this achievement.

Kent County chalked up an all-time record of 96 per cent attendance. Closest contender was Newaygo County with 88 per cent. Both Allegan and Ottawa lined up 76 per cent of their members at the meeting in Grand Rapids.

In actual number of registrants, Kent County also was first with 346, followed by Wayne (Detroit) with 279, Genesee (Flint) with 120, and Ingham (Lansing) with 103.

* * *

The Ingham County Medical Society will sponsor a series of exhibits entitled "Home Accidents—How Safe Is Your House," and "Nursing," in the State Capitol Building, Lansing, beginning February 1 and continuing through May 15.

Congratulations to the ICMS members on this excellent lay education program!

* * *

Leon DeVel, M.D., Grand Rapids, MSMS Rheumatic Fever Coordinator, will speak to the Sheridan and Marengo Township Health Councils February 8, 1956. His subject will be "Heart Disease and Rheumatic Fever—How to Avoid Them."

* * *

The Third National Cancer Conference will be held at the Sheraton-Cadillac Hotel, Detroit, June 4-5-6, 1956, under sponsorship of the American Cancer Society and the National Cancer Institute Public Health Service. Among the foreign speakers will be Sir Ernest Kennaway, M.D., of London, England; Johannes Clemmeson, M.D., of Copenhagen, Denmark; I. G. Williams,

Say you saw it in the Journal of the Michigan State Medical Society

M.D., London, England; Sven Hultberg, M.D., of Stockholm, Sweden; Jean Bernard, M.D., of the Curie Foundation in Paris, France; Aage Videback, M.D., of Copenhagen, Denmark; J. C. Lajtha, M.D., of Oxford, England; Dag Galton, M.D., of London, England; L. M. Franks, M.D., of London; Stanley Wray, M.D., of Middlesbrough, England; E. Wildebolz, M.D., of Berne, Switzerland; Komei Nakayama, M.D., of Chiba, Japan; R. E. Waller, M.D., of London, England; Alexander Haddow, M.D., of London; Albrecht Schmitt, M.D., of Cologne, Germany; Olle Kjellgern, M.D., of Gothenburg, Sweden; H. L. Kottmeier, M.D., of Stockholm, Sweden; Ernst Navatril, M.D., of Graz, Austria; T. A. Watson, M.D., of Saskatoon, Saskatchewan; Jens Nielson, M.D., of Copenhagen; M. Liederman, M.D., of London.

For program and full information, write Harry M. Nelson, M.D., General Chairman, 1060 Fisher Building, Detroit 2, Michigan.

* * *

E. R. Jennings, M.D., Detroit, was elected a District Director of the American Association of Blood Banks at its recent Chicago annual meeting, at which six foreign countries, forty states, and 284 cities were represented in the 815 persons registered.

* * *

New Officers of the Michigan Academy of General Practice: Russell F. Fenton, M.D., Detroit; John W. Rice, M.D., Jackson, President-Elect; E. Clarkson Long, M.D., Detroit, Secretary-Treasurer. Doctors Fenton and Immediate Past President Kenneth W. Toothaker, M.D., of Lansing, were named as Delegates to the American Academy of General Practice Convention.

* * *

Past President Henry R. Carstens, M.D., has moved from Washington, D. C., to 83 Longhill Street, Springfield, Massachusetts.

* * *

Corrections in the Roster of MSMS Members: Our apologies for omitting Honorary Member Don E. Johnson of 207 E. First Avenue, Flint, Michigan. Active Member C. H. Southwick, M.D., 55 Sheldon Ave. S.E., Grand Rapids, and for misspelling the name of C. L. R. Pearman, M.D., 1509 Kales Bldg., Detroit, Michigan.

* * *

A symposium on the Medical Aspects of Civil Defense, held at the Sheraton-Cadillac Hotel, Detroit, November 16, was sponsored by the Michigan State Medical Society, Michigan Office of Civil Defense, Michigan State Dental Society and Michigan State Veterinary Society. Financial sponsor was the Lederle Laboratories Division of the American Cyanamid Company. Total attendance was 325, including 191 doctors of medicine.

Speakers included Max L. Lichter, M.D., Detroit, and John M. Whitney, M.D., Battle Creek.

* * *

Dean W. Roberts, M.D., of Baltimore, has been appointed Executive Director of the National Society for Crippled Children and Adults, with headquarters at 11 S. LaSalle Street, Chicago 3, Illinois.

* * *

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maceutical Association, John A. MacCartney, Trade Relations Manager for Parke, Davis and Company, Detroit.

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* * *

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Henry Ford Hospital Auditorium—8:15 P.M.

January 17, 1956

"Preventive Surgery: Gains Versus Losses"
JONATHAN E. RHOADS, M.D., Professor of Surgery
University of Pennsylvania School of Medicine, Philadelphia, Pennsylvania

February 14, 1956

"Diagnosis and Treatment of Disseminated Miliary Diseases of the Lungs"
MARION A. BLANKENHORN, M.D., Professor of Medicine
University of Cincinnati College of Medicine, Cincinnati, Ohio

March 13, 1956

"New Work on Pain"
HENRY K. BEECHER, M.D., Dorr Professor of Research in Anesthesia
Harvard Medical School, Boston, Massachusetts

May 15, 1956

The Roy D. McClure Memorial Lecture
"How Good is the Evidence for an Etiological Relationship Between Cigarette Smoking and Cancer of the Lung?"
EVARTS A. GRAHAM, M.D., Professor of Surgery
Washington University School of Medicine, St. Louis, Missouri

June 19, 1956

"Observations on the Clinical Course of Systemic Lupus Erythematosus"
A. MCGEHEE HARVEY, M.D., Professor of Medicine
The Johns Hopkins University School of Medicine, Baltimore, Maryland

* * *

Diabetes is the only disease with a Michigan death rate higher than the rate for the country as a whole, among the five leading causes of death in this state. The diabetes death rate in Michigan, 1954, was 20.9 deaths per hundred thousand population, considerably higher than the estimated rate for the nation which stood at 15.4.

* * *

L. Fernald Foster, M.D., Bay City, Secretary of the Michigan State Medical Society and chairman of the Advisory Committee of the State Journal Advertising

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CUMERTILIN Sodium Injection, 1- and 2-cc. ampuls, in boxes of 12, 25, and 100; and 10-cc. vials, individually and in boxes of 10 and 100.

1. Pollock, B. E., and Pruitt, F. W.: Am. J. M. Sc., 226:172, 1953.

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Bureau, was general chairman of the State Medical Journal Conference, held at AMA headquarters in Chicago, November 7-8-9, 1955. Michigan speakers at the Conference besides Dr. Foster included Wm. J. Burns, Executive Director, Michigan State Medical Society and Dirk Gringhuis, East Lansing, cover illustrator for JMSMS.

Alton Ochsner, M.D., New Orleans, and **Owen H. Wangensteen, M.D.,** Minneapolis, guest speakers on cancer control at the 1956 Michigan Clinical Institute, will be honored guests at a luncheon at the Sheraton-Cadillac Hotel, Detroit, on Wednesday, March 7.

The testimonial is being sponsored by the Michigan Cancer Co-ordinating Committee, the American Cancer Society, Michigan Division and Southeastern Michigan Division, and the Michigan Foundation for Medical and Health Education, Inc.

For reservations, contact E. W. Tuescher, 4811 John R. Street, Detroit, Michigan.

The American Goiter Association will hold its annual meeting at the Drake Hotel, Chicago, on May 3-4-5, 1956. All members of the Michigan State Medical Society have been cordially invited to attend by J. E. Kearns, M.D., 636 Church Street, Evanston, chairman of the Public Relations and Publication Committee. Program and full information may be obtained by writing Dr. Kearns.

* * *

T. E. Schmidt, M.D., Jackson, is serving as Information and Extension Counselor for Rotary International. Dr. Schmidt, a member of Jackson Rotary Club since 1941, is a past president of that club and also Past District Governor of Rotary International.

* * *

Wm. J. Burns, Executive Director of the Michigan State Medical Society, had been made a member of the Executive Committee of the Board of Directors of the American Trade Association Executives, and also has been appointed chairman of its Committee on Professional Standing.

* * *

New members of the Michigan State Medical Society gain a special benefit of membership: Health and Accident insurance coverage through the MSMS plan with Provident Life and Accident Insurance Company of Chattanooga, Tennessee. This tailored policy contains tangible advantages for medical practitioners of Michigan. The program is one of the important and worthwhile services available to members.

* * *

MSMS President W. S. Jones, M.D., Menominee, is visiting component societies in Michigan and presenting an interesting lantern slide demonstration entitled—"Seventeen—For You." President Jones' presentation epitomizes the structure of organized medicine in Michi-

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BRIGHTON HOSPITAL is owned and operated by MICHIGAN ALCOHOLIC REHABILITATION FOUNDATION, a non-profit organization devoted to the best possible hospitalization of the alcoholic who seeks to stop drinking.

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BRIGHTON HOSPITAL

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gan and shows the services available to component societies and the individual members of organized medicine in this state.

* * *

Norman F. Miller, M.D., Ann Arbor, was elected First Vice President of the American Academy of Obstetrics and Gynecology at the Academy's annual convention.

Congratulations, Doctor Miller!

* * *

Talks for the laity on pediatrics.—The Michigan Branch of the American Academy of Pediatrics has a speakers bureau ready and willing to co-operate in the presentation and discussion of rural child health problems before PTA's, rural health groups, Grange meetings, and other organizations in all parts of Michigan. A local doctor of medicine should make the request for the speaker (not the lay group). Write the Academy, c/o Chairman Harry A. Towsley, M.D., 1313 E. Ann Street, Ann Arbor.

* * *

C. Allen Payne, M.D., Grand Rapids, chairman of the MSMS Public Relations Committee, will be guest speaker at the County Society Officers Conference of the Kentucky State Medical Association in Lexington on March 29. Dr. Payne will speak on "Where Public Relations Begins and Ends."

* * *

The Annual County Secretaries-Public Relations Seminar of the Michigan State Medical Society will be held January 27-28-29, 1956, at the Sheraton-Cadillac Hotel, Detroit.

This year's seminar begins Friday evening and ends Sunday noon. The time in the interim will be jam-packed with information of vital concern to county society presidents, presidents-elect, secretaries, editors, and chairmen of their public relations committees.

* * *



S. W. Donaldson, M.D.

Samuel W. Donaldson, M.D., Ann Arbor, will be awarded the Gold Medal of the American College of Radiology at its Annual Meeting in February. The honor is given in recognition of outstanding contributions to radiology. The Gold Medal of the College of Radiology is a rare honor. Only 13 other persons have received this award, including Madamie Marie Curie, discoverer of radium, and Dr. W. D. Coolidge, who invented the modern X-ray tube.

Dr. Donaldson is a Past President of the Washtenaw County Medical Society.

Congratulations, Dr. Donaldson!

* * *

William A. Hyland, M.D., Grand Rapids, chairman of the Michigan delegation to AMA House of Delegates, Boston Clinical Session of December, 1955, was a member of the Medical Education and Hospitals Reference Committee at this meeting.

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Internal Medicine	
Clinical Internal Medicine (Thursdays)	January 5-April 12
Diseases of the Heart	March 12-16
Electrocardiographic Diagnosis	March 19-24
Metabolism and Endocrinology	March 26-30
Diseases of Blood and Blood-Forming Organs	April 2-6
Diseases of Gastro-Intestinal Tract	April 9-13
Recent Advances in Therapeutics	April 23-27
Ophthalmology	April 23, 24 and 25
Otolaryngology	April 19, 20 and 21
Pediatrics-Obstetrics and Gynecology	January 23-28
Radiology, Diagnostic	April 2-6
Radio-active Isotopes, Clinical Use of	As arranged
Basic Sciences	October 3-June 1

Further information and application blanks may be obtained from: John M. Sheldon, M.D., Director, Department of Postgraduate Medicine, 1610 University Hospital, Ann Arbor, Michigan.

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J. S. DeTar, M.D., Milan, was a member of the Reference Committee on Sections and Section Work.

R. L. Novy, M.D., Detroit, was a member of the Reference Committee on Reports of Officers.

* * *

J. P. Gray, M.D., Detroit, was elected a Director of the American Medical Writers' Association for 1956-57, at its recent annual meeting in St. Louis.

* * *

Elmer Hess, M.D., Erie, Pennsylvania, President of the American Medical Association, and Benson Ford, Detroit, Vice President of Ford Motor Company, were principal speakers at the 16th Annual Congress on Industrial Health, held at the Sheraton-Cadillac Hotel, Detroit, on January 23-24.

Symposia on "Occupational Medicine in Industrial Relations," on "Medicine's Responsibilities in the Automotive Age," and on "Absence from Work Due to Non-occupational Illness and Injury," constituted the scientific program of this interesting two-day meeting which was sponsored by the AMA, The Michigan State Medical Society, the Wayne County Medical Society, the Michigan Industrial Medical Association, Detroit Industrial Physician's Club, and the Detroit Society for Surgery of Trauma.

* * *

Seventy-two per cent of the patients entering the University Hospital at Ann Arbor are paying patients (either by insurance or personal funds), according to A. C. Kerlikowske, M.D., Director of the Hospital. In his annual report, Dr. Kerlikowske also disclosed that on the basis of a study of 1,000 consecutive admissions, less than half these patients carried hospitalization insurance. "However, the trend is for more people to be covered by insurance," declared Dr. Kerlikowske.

The report also indicated approximately 9,000 operations performed; 1,524 babies born in Woman's Hospital; 2,033 outpatient visits—an increase of 10 per cent; 3,118 people employed (72 per cent female).

* * *

The diagnostic and consultative facilities of the Michigan Epilepsy Center have been moved to new headquarters at 2912 West Grand Boulevard, Detroit 2.

"In 1947, the idea which captured the imagination of the Center's planners was something not being considered elsewhere in the country—to use a multiple approach to this illness of multiple causation," Frank S. Perkin, M.D., President of the Board of Directors, said in announcing the move. "The Center has grown steadily since its inception and offers a total study of the convulsive person and complete evaluation. It has long outgrown the quarters at 96 West Ferry."

Dr. Perkin recalled that Michigan Epilepsy Center and its staff of specialists began operations with the counsel and support of medical societies. Subsequently the Center was given financial support by the Michigan United Fund, the United Foundation and many other local funds which enabled the Center to develop its program on a statewide basis.

T.B.: The fact must constantly be remembered that no case of tuberculosis can be treated unless it is first discovered. Furthermore, success with the newer forms of treatment, as with the old, is inversely related to the length of time the disease has been present and the degree of involvement when therapy is begun—the longer it has been present and the more extensive the disease, the less effective the treatment. 23rd Annual Report of the American College Health Association, *Journal-Lancet,* April, 1955.

* * *

Public attitudes on drug costs. Of the adult population, 40 per cent believe food costs are much too high—45 per cent believe repair charges (automobile, TV, etc.) are excessive—27 per cent are equally critical of clothing costs—but only 26 per cent believe that the cost of medical care is much too high.

This is from a national survey made by the Health Information Foundation of New York. While medical costs in general came in for less criticism than other elements of the cost of living, within the category of medical costs the percentage believing costs "much too high" for doctors' fees is 16 per cent; hospital charges, 39 per cent; dentists' fees, 24 per cent; prescriptions at drug stores, 38 per cent.

Thirty-eight per cent of the population believe the cost of prescriptions is much too high and 28 per cent believe, that costs are somewhat higher than should be.

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The Michigan State Board of Alcoholism is making scholarships available to Yale Summer School of Alcohol Studies, July 1-26, 1956. These $250 scholarships include registration fee, tuition, and room and board (exclusive of Sunday meals), and are designed to give physicians a better understanding of alcoholism. Deadline date for submitting application is March 12, 1956.

For information, write George Nimmo, Educational Director, Michigan State Board of Alcoholism, Box 686, Lansing 2.

AND THEN CAME "MEDIC"

(Continued from Page 69)

Angeles County Medical Association. It didn't have to be NBC that picked it up or Dow that went on the line to sponsor it.

But there did have to be this willingness to reach out beyond the conventional and the established—to take a chance, if you will.

That, it seems to me, is the turnstile of all human advancement. Progress, of course, springs fundamentally from man's discontent with the status quo. And it is not possible without ingenuity, inventiveness or its more methodical counterpart, research. But, then, given the first two, it all can come for nought if we refuse to go through the gate—if we lack the courage of our convictions or faith in the new thing or the new concept we have devised.

So long as you men of medicine have the sincerity and courage to seek better answers, so long as the pharmaceutical and chemical industries are willing to turn research dollars into strange channels that lead we know not where, so long as all the sciences are of similar willingness, we shall together spin our yarn of progress.

Happily it will lead us to much more vital things than even award winning television programs.

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THE MECHANISMS OF HEALING IN HUMAN WOUNDS. A Correlation of the Clinical and Tissue Factors involved in the Healing of Human Surgical Wounds, Burns, Ulcers, and Donor Sites. By Shattuck W. Hartwell, B.S., M.S., M.D., Ph.D. in Surgery, F.A.C.S., F.I.C.S., Diplomate of the American Board of Surgery, Attending Surgeon, Hackley Hospital, and Chief of Surgery, Mercy Hospital, Muskegon, Michigan; Surgeon, United States Army's 237th Station Hospital, 1943-1944 (Utica, New York and New Guinea); Chief of Surgery, United States Army's 120th General Hospital, Manila, P.I., 1943; Member, New York Academy of Sciences. Springfield, Illinois: Charles C Thomas, 1955. Price $4.75.

All surgeons are interested in the mechanisms of wound healing. This monograph, written so well by a distinguished Michigan surgeon, is a definite addition to the existing literature on the subject. It is not a review but rather an original contribution representing more than twenty-five years of research, both laboratory and clinical. This knowledge has been well correlated. The book is well written, well illustrated, and answers many a question the surgeon has in regard to wound healing. The author points out the difference between animal and human wounds healing by primary intention. He also demonstrates the importance of mononuclear blood cells in the formation of connective tissue in wounds. He shows that fat plays an important part in furnishing basic chemical materials for the formation of collagen fibers. The concept that human epithelium is composed of potentially amoeboid cells is discussed with the conclusion that this concept (original with the author) correlates well with clinical and experimental observations. The basal cell layer of the surface epithelium is thought to be merely an adaptive layer of the more primitive epithelial layers, and the author feels this explains the greater malignancy of squamous-cell carcinoma as compared to that of basal-cell epithelioma. These observations, among many others, point out the originality of the text. The reviewer suggests that every surgeon would be well advised to add this small, well-written book to his library.

J. W. H.

DOCTOR AND PATIENT. By Desmond O'Neill, M.D., M.R.C.P. (Lond.), D.P.M. (Eng.) Physician, Department of Psychiatry, St. Mary's Hospital, London Psychiatrist, Chelsea Hospital for Women; Clinical Assistant, Department of Psychological Medicine, University College Hospital Philadelphia, Montreal: J. B. Lippincott Company, 1955. Price $5.00.

Though most experienced clinicians will find little that is new in this monograph, they will find the important factors of a psychosomatic approach to medicine presented in a concise and interesting fashion. For the physician with limited clinical experience this book holds much to aid him in the management of the

Say you saw it in the Journal of the Michigan State Medical Society

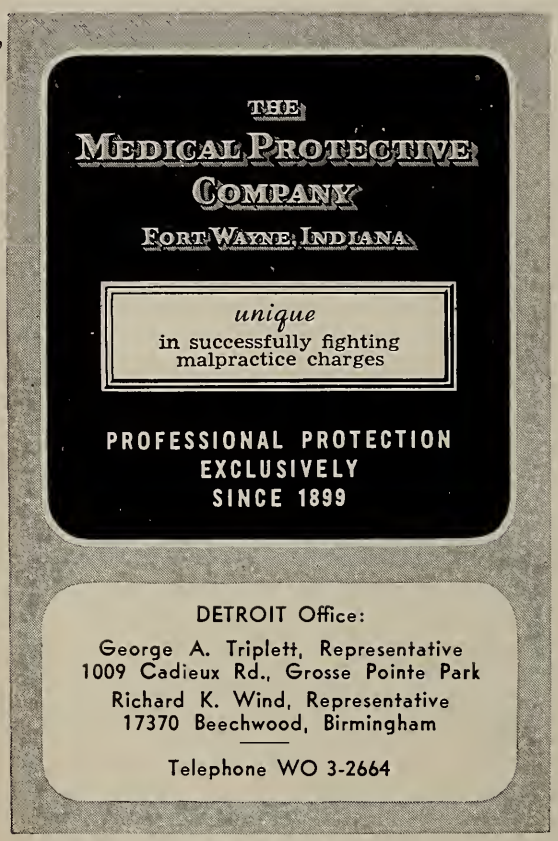
difficult patient and in the treatment of those disorders that do not fall into the crystal clear syndromes of his medical school days.

The monograph is short and well arranged for quick reference. The patterns of "Stress Symptoms" are organized under the major manifestation: Abdominal Pain—Amenorrhoea, Constipation, et cetera. The text is adequately supported by illustrative excerpts from clinical records. The final chapter is a review of therapy for the syndromes of stress. It includes a brief discussion of therapeutic measures (electroshock, leucotomy) utilized in the disorders more resistant to treatment.

F.O.M.

ATOPIC DERMATITIS. Edited by Rudolf L. Baer, M.D., Associate Professor of Clinical Dermatology and Syphilology, New York University Post-Graduate Medical School. New York University Press, 1955. J. B. Lippincott Company, distributors, Philadelphia and Montreal: Price $2.50.

This is a monograph of 100 pages covering rather completely the subject of atopic dermatitis which is one of the more common of the dermatoses and a subject in which there is a great difference in opinions. The book is edited by R. L. Baer and has five outstanding contributors. The field is covered from pathogenesis to treatment with consideration of the various opinions found in the literature. The book does a good job on a difficult subject.



Communications

Dear Dr. Haughey:

A cordial invitation is extended to members of the medical profession to attend the monthly meetings of the Henry Ford Hospital Medical Society. If possible, we would like to have the program of our Society for the present year appear in THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY for the interest of those who may have the opportunity of attending these meetings.

Very truly yours,
MELVIN A. BLOCK, M.D., *Secretary*
Henry Ford Hospital Medical Society

Detroit, Michigan
November 21, 1955

Dear Bill Burns:

The Michigan legislature has just passed a significant law involving driver education for Michigan youth.

I wish to acknowledge the outstanding assistance of the Michigan State Medical Association in the passage of this law. The law itself does three specific things: first, it subsidizes driver education in the high schools up to $25 per student with a program available to both boys and girls in public, private and parochial schools and also out-of-school youth; secondly, the law, and this is the first time in the history of our country, will make driver training a prerequisite for obtaining a driver's license for all those under the age of 18, beginning February 1, 1957. And third, it requires that a high school course be offered and provides a system of certification for both public and privately operated training programs.

Thanks again for your assistance and I hope you will convey my appreciation to Dr. Rodger and the members of your safety committee and other members of your Association.

Yours sincerely,
CLAIR L. TAYLOR, *Superintendent*
Michigan Department of Public Instruction

Lansing, Michigan
November 8, 1955

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THE JOURNAL
of the Michigan State Medical Society

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J. M. Sheldon, M.D.



C. C. Sturgis, M.D.

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©1956, by Michigan State Medical Society.

Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 14, Minnesota.

Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, $6.00; single copies, 60 cents. Additional postage; Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year.

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R. L. Novy, M.D., Detroit	1956
C. I. Owen, M.D., Detroit	1957

Alternates

G. W. Slagle, M.D., Battle Creek	(1)	1956
William Bromme, M.D., Detroit	(2)	1956
J. R. Rodger, M.D., Bellaire	(3)	1956
W. W. Babcock, M.D., Detroit	(1)	1957
E. F. Sladek, M.D., Traverse City	(2)	1957
O. J. Johnson, M.D., Bay City	(3)	1957

Section Delegate
G. C. Penberthy, M.D. (Surgical Section).....Detroit

Upjohn

Ulcer protection that lasts all night:

Pamine*-Phenobarbital
BROMIDE

Tablets

Each FULL-STRENGTH tablet contains:

Phenobarbital..... 15.0 mg. (¼ gr.)
Methscopolamine bromide..... 2.5 mg.

Dosage:

One tablet one-half hour before meals, and 1 to 2 tablets at bedtime.

Each HALF-STRENGTH tablet contains:

Phenobarbital..... 8.0 mg. (⅛ gr.)
Methscopolamine bromide..... 1.25 mg.

Dosage:

While the dosage and indications are the same as for the full-strength tablets, this tablet allows greater flexibility in regulating the individual dose, and may be employed in less severe gastrointestinal conditions.

Supplied:

Both strengths in bottles of 100 tablets.

*REGISTERED TRADEMARK FOR THE UPJOHN BRAND OF METHSCOPOLAMINE

The Upjohn Company, Kalamazoo, Michigan

You and Your Business

HOMETOWN MEDICAL CARE ASKED FOR DEPENDENTS OF SERVICE PERSONNEL

The AMA House of Delegates (Miami, 1954) adopted the following statement concerning medical care for dependents of military personnel:

". . . if it is to be the policy of the government to provide for medical care for dependents of service personnel, the services of civilian physicians and hospitals be used wherever possible, to be paid for at prevailing rates, with provision for free choice of physicians."

At a December meeting of members of the AMA Council on Medical Service Staff et al, it was suggested that the most practical way to meet the problem of medical care for dependents of service personnel would be on the basis of the pattern established in the veterans' "hometown care" program. This would be a practical approach to this problem and would ward off salaried physicians and other devices that by compulsion would keep the patient away from his family doctor.

The "hometown medical care" type of program would assure free choice of physician and hospital on a fee-for-service basis with Blue Shield acting as an administrative agency, for the doctors.

The Executive Committee of The Council, MSMS, at its December, 1955, meeting, authorized Michigan Medical Service to proceed with an offer of the "hometown medical care" program in negotiations on this subject with the Department of Defense. This action was taken to provide good and adequate service to dependents of servicemen through a medium that has proved effective over the years—and to preserve the physician-patient relationship for the benefit of the ill or injured person.

AMA POSITION ON SOCIAL SECURITY

WHEREAS, The Old Age and Survivors Insurance section of the Social Security Act has become an important source of retirement and survivors' security for the American people, and Social Security payments represent an important element of personal income in the national economy; and

WHEREAS, Liberalizing amendments to the Social Security Act have been so frequently enacted in election years as to justify the inference that political expediency rather than sound public policy was their motivation; and

WHEREAS, The Social Security Amendments of 1955 (H.R. 7225, 84th Congress), now pending before the Committee on Finance of the United States Senate, are a typical example of an irresponsible political approach to amendment of the Social Security Act, in that this measure was conceived in secret in the Committee on Ways and Means, adopted in brief executive session without public hearings despite the request of many witnesses to be heard, rushed to the floor of the House of Representatives before the report of the Committee on Ways and Means was available, pressured through the House by a maneuver which by-passed the Committee on Rules, permitted no amendments and allowed only forty minutes of debate; and

WHEREAS, This measure includes sections which would authorize payment of federal cash disability benefits to selected individuals under the Old Age and Survivors Insurance section of the Social Security Act, as a matter of statutory right and without regard for the need of these individuals for cash assistance; and such cash benefits contingent on continued disability are known to be contrary to sound medical practice in the treatment and rehabilitation of the physically and mentally disabled; and

WHEREAS, The American system of the private practice of medicine, keeping inviolate the physician-patient relationship, has brought to the American people the world's highest standard of medical care, any interference by a third party, government or private, with the physician-patient relationship will destroy the principle upon which our successful system of medical care has been built and will lead inevitably to the deterioration of the quality of medical care available to the American people; and

WHEREAS, There has never been an adequate, objective, unbiased study of the nature, cost and scope of the Old Age and Survivors Insurance section of the Social Security Act and its economic, social and political impact on the American people; therefore be it

RESOLVED, That the American Medical Association reiterate in the strongest possible terms its determination to resist any encroachment upon the American system of medical practice which would be detrimental to our patients, the American people, and be it further

RESOLVED, That the American Medical Association urge and support the creation of a well-qualified commission, either governmental or private, or both, to make a thorough, objective and impartial study of the economic, social and political impact of Social Security, both medical and otherwise, and that the facts developed by such a study should be the sole basis for objective non-political improvements to the Social Security Act, for the benefit of all of the American people; and be it further

RESOLVED, That the American Medical Association pledges its wholehearted co-operation in such a study of Social Security in the United States, and will devote its best efforts to procuring and providing full information on the medical aspects of disability, rehabilitation, and medical care of the disabled, and be it further

RESOLVED, That copies of this resolution be transmitted to the President of the United States, to all members of the Cabinet, to all members of the Congress, and to all constituent state medical associations.

Adopted by the House of Delegates, Boston, Massachusetts, December 1, 1955.

(Continued on Page 120)

WHY SENSITIZE

in topical and ophthalmic infections

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POLYMYXIN B—BACITRACIN OINTMENT

to insure broad-spectrum therapy with minimum allergenicity

For topical use: in ½ oz. and 1 oz. tubes.
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RESOLUTIONS ADOPTED BY MSMS HOUSE OF DELEGATES

September 26-27, 1955

AMA STUDY COMMITTEE ON HIGHWAY ACCIDENTS

RESOLVED, That the Michigan Delegation to the American Medical Association be requested to introduce at the forthcoming Boston meeting of the AMA House of Delegates a resolution requesting the Board of Trustees of the American Medical Association to appoint a special committee to study the prevention of highway accidents.

DRIVER TRAINING PROGRAM

WHEREAS, At the forthcoming special session of the Legislature of Michigan the matter of State subsidy to schools for student driver training will be seriously considered, and

WHEREAS, the universal adoption of an adequate driver training program in Michigan's schools within ten years promises at least a 10 per cent reduction in highway fatalities, or the saving of approximately 200 lives a year; therefore be it

RESOLVED, That this House of Delegates go on record as strongly endorsing the principle of State subsidy of student driver training; and that each delegate here, and so far as possible each member of the Michigan State Medical Society as an individual citizen, bring this matter to the attention of civic groups in his community as well as to his State senator and representative.

HOSPITAL FACILITIES FOR MENTALLY ILL

WHEREAS, Michigan's facilities for the care of the mentally defectives are overtaxed and overcrowded, and long delays are being encountered in gaining admission to our State institutions, to the great detriment of the mental hygiene of the families involved, and

WHEREAS, At the present time there are about 1,200 committed patients of young age and "crib status" who are in urgent need of immediate medical care in hospital setting, and

WHEREAS, There is also a great and ever-growing number of additional mentally defectives who likewise require training and medical care, and who are a hazard to the mental health (adjustment) of their immediate relatives; therefore be it

RESOLVED, That the Michigan State Medical Society recommend immediate definitive action by the Governor and Legislature of the State of Michigan to correct and prevent the recurrence of this deplorable condition, and be it further

RESOLVED, That such definitive action not be allowed to impair in any way the efficient tuberculosis control programs now in effect and planned for this State; and be it further

RESOLVED, That copies of this resolution be delivered to all of the State legislators as well as the Governor before the next session of the Legislature.

FEE FOR EXAMINATION OF MENTALLY ILL

WHEREAS, The fee established by legislative enactment for the examination of mentally ill has not been increased in over twenty years, and

WHEREAS, This makes it difficult for the Probate Court to obtain such examinations; therefore be it

RESOLVED, That the Michigan State Medical Society take steps to bring an increase in this fee.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of December 14, 1955

- **Scroll to R. L. Novy, M.D.,** Detroit, long-time President of Michigan Medical Service. The phraseology of this scroll, as authorized by the 1955 MSMS House of Delegates, was approved.
- **A letter from Veterans Administration** suggesting discontinuance as of July 1, 1957, of the successful "Home Town Medical Care" program for veterans was thoroughly discussed and referred to a committee headed by President W. S. Jones, M.D., for appropriate action.
- **Special committee** to study financial structure of MSMS. Speaker Livesay announced the personnel of this committee, authorized by 1955 MSMS House of Delegates: O. K. Engelke, M.D., Chairman, Ann Arbor; C. W. Colwell, M.D., Flint; E. H. Fenton, M.D., Detroit; E. G. Krieg, M.D., Detroit; S. L. Loupee, M.D., Dowagiac, and H. J. Meier, M.D., Coldwater.
- **Committee Reports.**—The following were given consideration: (a) AMA Clinical Session in Boston, December, 1955; (b) Arbitration Committee, meeting of November 11; (c) Scientific Work Committee, November 22; (d) Tuberculosis Control Committee, November 30; (e) Permanent Conference Committee, November 30; (f) Ethics Committee, December 2; (g) Rheumatic Fever Control Committee, December 7; (h) Child Welfare Committee, December 8; (i) Beaumont Memorial Committee, December 13.
- **A joint meeting** with the Executive Committee of the Board of Trustees, Michigan Hospital Association, was held. Representing MHA were President Mildred Riese, Detroit; Immediate Past President Andrew Patullo, Battle Creek; and Secretary H. Allan Barth. Matters of mutual interest were discussed.
- **For the 1956 Michigan Clinical Institute,** C. L. Weston, M.D., of Owosso, was appointed Chairman of the Scientific Press Committee. Members are H. F. Dibble, M.D., Detroit; A. B. Gwinn, M.D., Hastings; Ralph W. Shook, M.D., Kalamazoo, and Arch Walls, M.D., Detroit. W. B. Harm, M.D., Detroit, was selected chairman of the Testimonial Luncheon of March 8, arranged to honor Michigan M.D.'s who are presidents of national medical and health associations.
- **The University of Michigan** proposal for the physical examination of medical students by their family doctors was approved.
- **The use of IBM equipment** for the MSMS membership records, as of January 1, 1957, was approved. A committee to investigate details was appointed: L. Fernald Foster, M.D., Bay City, Chairman; Wilfrid Haughey, M.D., Battle Creek, and R. L. Novy, M.D., Detroit.

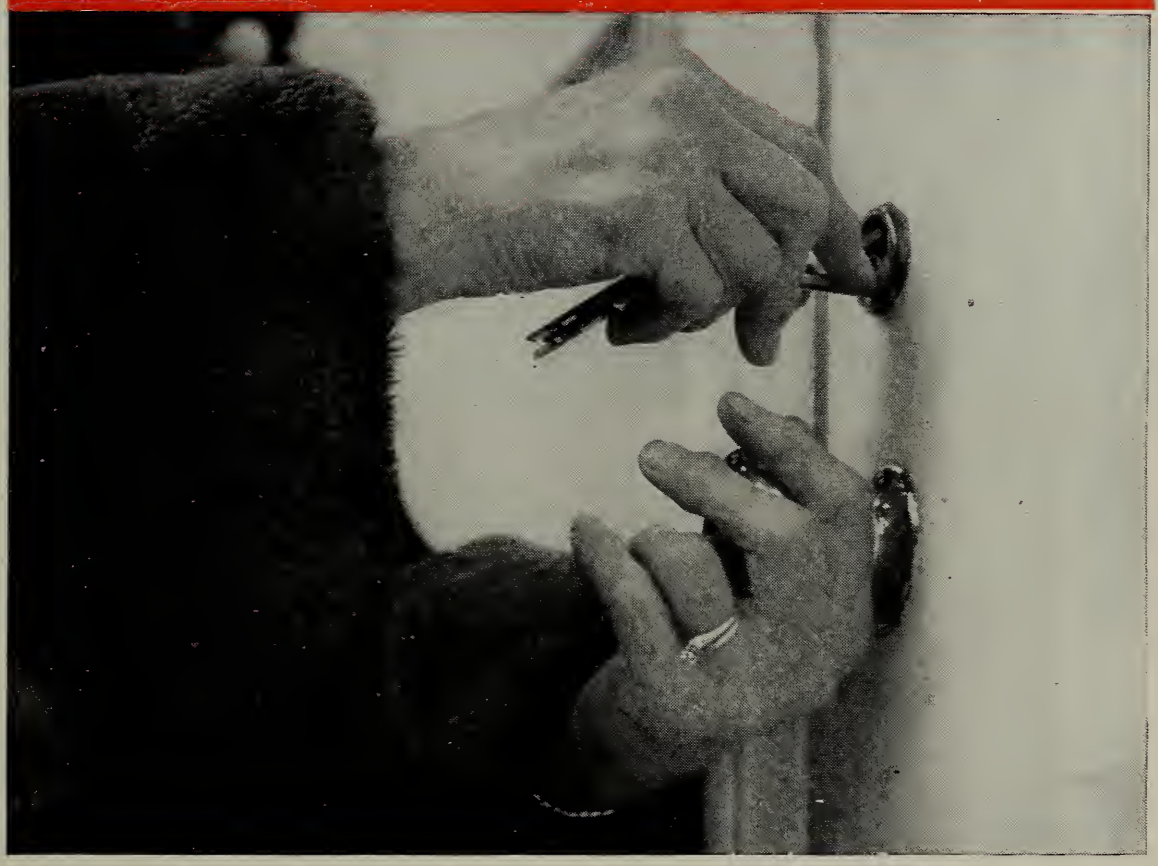
(Continued on Page 122)

HydroCortone®

(HYDROCORTISONE, MERCK)

A valuable aid in rehabilitating the arthritic patient

MAJOR ADVANTAGES: Greater anti-rheumatic activity than cortisone; smaller doses produce clinical improvement faster and more uniformly.[1]



HYDROCORTONE is a practical long-term therapeutic measure in the majority of patients suffering from rheumatoid arthritis. The use of small doses of HYDROCORTONE in conjunction with conservative general measures will permit the safe management of these arthritics for prolonged periods of time. Such a program has been shown to provide moderate to great relief in a very high percentage of patients.[2] In severely handicapped people, HYDROCORTONE plus physical therapy will frequently allow the rehabilitation of arthritics who would not be helped appreciably by either measure alone.[3]

OTHER INDICATIONS: Still's Disease, rheumatoid spondylitis, psoriatic arthritis, traumatic arthritis, osteoarthritis, and bursitis.

SUPPLIED: ORAL—HYDROCORTONE Tablets: 20 mg., bottles of 25, 100, and 500 tablets; 10 mg., bottles of 50, 100, and 500 tablets; 5 mg., bottles of 50 tablets. **INTRASYNOVIAL**—Saline Suspension HYDROCORTONE-T.B.A.: 25 mg./cc., vials of 5 cc. Saline Suspension HYDROCORTONE Acetate: 25 mg./cc., vials of 5 cc.

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DIVISION OF MERCK & CO., INC.

REFERENCES: 1. Boland, E. W. and Headley, N. E., *J.A.M.A.* **148**:981, March 22, 1952. 2. Ward, L. E., Polley, H. F., Slocumb, C. H. and Hench, P. S., *J.A.M.A.* **152**:119, May 9, 1953. 3. Snow, W. B. and Coss, J. A., *N.Y. State J. Med.* **52**:319, Feb. 1, 1952.

Ford Foundation Helps Hospitals and Medical Schools

One hundred fifty privately supported Michigan hospitals in communities throughout the state will share $8,930,300 out of the $500,000,000 in grants appropriated by the Ford Foundation and announced in mid-December.

Realizing the importance of these grants to the improvement and extension of hospital service in Michigan, MSMS was quick to congratulate the Ford Foundation on its generosity. In a letter from President William S. Jones, M.D., on behalf of The Council, Dr. Jones stated:

"It is my happy privilege to write you this letter of high commendation for your financial assistance in areas where help is direly needed. Congratulations on this latest generosity of the Ford Foundation."

In reply, H. Rowan Gaither, Jr., President of the Ford Foundation, said:

"The response throughout the country has given all of us at the Foundation a deep sense of satisfaction. We shall be even more pleased if the grants further serve to emphasize the continuing need of our independent institutions for private support."

The gifts to Michigan hospitals range up to $250,000, with no institution on the list receiving less than $10,000. Of the 150 Michigan hospitals participating, thirty-three will receive more than $100,000, and of these twelve will receive more than $150,000, and five more than $200,000. The grants, which are still subject to final determination, are scheduled to be paid over the next eighteen months.

The terms of the grant place full responsibility on the governing authorities of each hospital to spend the funds in accordance with local needs and problems. Use of the funds will be permitted for any program of improvement or extension of hospital service, but not for operating expenses or services currently being performed by the hospitals.

"A particular purpose of the grants would be to assist hospitals desiring to do so to achieve full accreditation with the Joint Commission on Accreditation of Hospitals," the Ford Foundation said in announcing these special appropriations. "Programs may be in the form of improvement of or addition to facilities or services, additions to or training of personnel, and conducting research.

"Within these broad limits, the recipient hospital may use its grant in any area of hospital service, including, for example, disaster planning, mental illness, prematurity, rehabilitation, handicapped children, preventive or diagnostic services, outpatient care, or any other area which in the opinion of the hospital's governing board would best serve its community."

Computation of grants was based on reports from each hospital to the American Hospital Association. The amounts were determined on the basis of patient days of service provided by the hospital, and the number of births in the hospital (days of care given to newborn infants are not shown in the patient day tabulation normally; therefore, the number of births was added to patient days "as a measure of an important hospital service").

Nationwide, the Ford Foundation appropriated a total of $200,000,000 for approximately 3,500 voluntary nonprofit hospitals.

Another $90,000,000, appropriated but yet to be distributed, will go to privately-supported medical schools to help them strengthen their instruction. Allocations to individual schools will be determined following the report of an advisory committee. Since Michigan's two medical schools are government-supported institutions, it is not anticipated that they will share in the Ford Foundation grants.

Yet another $210,000,000 was appropriated for 615 private liberal arts and sciences colleges and universities to help them raise teachers' salaries. Of these grants, thirteen Michigan colleges will share $724,300.

The gifts to colleges and medical schools must be used as endowment, from which the income is to be used to increase faculty salaries. After ten years, either the principal or income may be used for any academic aid.

"With deeply-etched personal memories of Armistice Day in France, on November 11, 1918, V-E Day in Europe, and V-J Day in the Pacific, what a tragedy it is that so many of our finest young men must die . . . to settle so little."—JOHN S. KNIGHT, Editorial in *Detroit Free Press*, September 1, 1955.

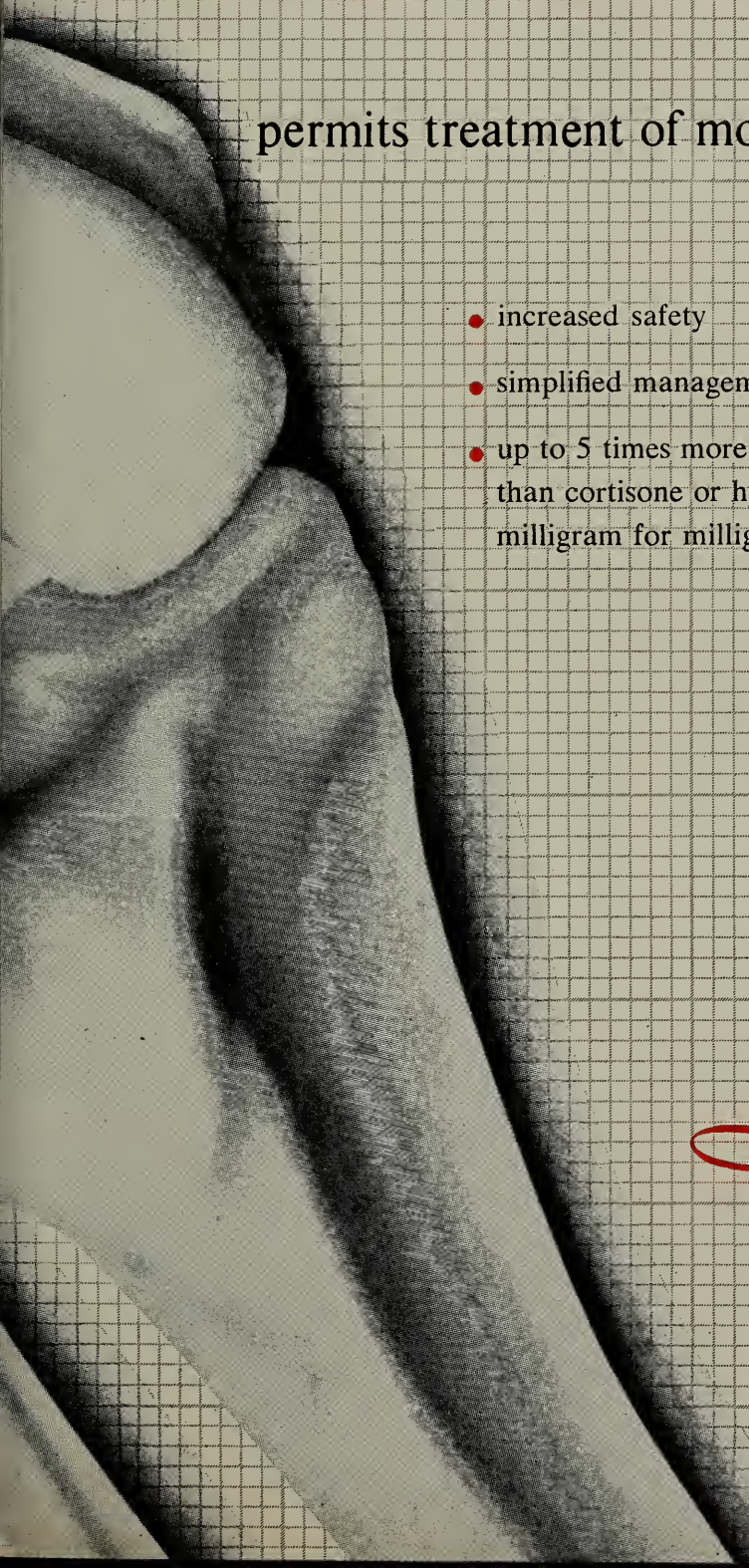
rather than cortisone
or hydrocortisone

METICORTEN*

PREDNISONE

permits treatment of more patients

- increased safety
- simplified management
- up to 5 times more effective than cortisone or hydrocortisone, milligram for milligram



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Family Doctors to Examine University Students

For the first time since 1922, new entering students of the University of Michigan, beginning with the fall enrollment, 1956, will be required to have medical examinations completed by their family physicians, according to Morley B. Beckett, M.D., Director, University of Michigan Health Service. This is a new plan decided upon to provide better and more personal doctor-patient relationships and to give opportunity for correction of defects before students enter the University.

Since 1922 examination of freshmen and transfer students has been accomplished each fall by the mass-line method. In 1955 over 6,000 such examinations were done. The great numbers forced a study to be made of the whole procedure with the idea of improving the methods employed. After careful consideration it was decided that many advantages would accrue from changing from the old method to a home town physician examination.

The cumbersome mass-line examination completely eliminated any semblance of physician-patient relationship. As enrollments continued to increase at the University, this relationship lost meaning in the numbers of students who had to be examined. The educational advantages originally gained by medical students from the old method were soon cancelled by the sheer weight of numbers of examinations. Other objections to the old method were raised by many older students and those who were accustomed to medical guidance from their family physicians.

Examinations accomplished by personal physicians in advance of the students' arrival in Ann Arbor will permit proper correction of defects before they enter the University. This should cut down the amount of absenteeism from classes and study sometimes caused by the emergency correction of defects which become aggravated during the first days of pressure of campus life. Such defects are often uncorrected visual defects, dental caries, hearing losses, hernia, acne, emotional disturbances, anemia, and numerous others.

Information obtained from the home town physicians will be most helpful in the care of the students by physicians of the Health Service. We will ask for any medications or treatments which the student is receiving so that these may be followed during the school year. It is important in emergencies that the Health Service be aware of drug sensitivities or allergic reactions known to the family physician. We consider that the Health Service should promote good medical knowledge and be in close touch with family physicians for any care which is given while the students are in residence here.

An opportunity was taken in preparation of the medical report form to advocate proper medical and dental care and early recognition and correction of defects. Much of the form is to be prepared by the prospective student for educational reasons, saving the physician's time and providing a background of information. The physician is asked to complete only the back page in which the questions are intended to be concise and important. Financial arrangement for the medical examination is a private matter between the physician and the student and is a responsibility of the student.

In no way will the examinations which are returned in envelopes marked "confidential" to the University Health Service be a basis for refusing to accept a student, except in such obvious group-dangerous conditions as open tuberculosis. These reports should facilitate the educational program by making it possible for the Health Service to provide such special care as might be required in cases of diabetes, hay fever, epilepsy, emotional problems, or physical handicaps.

Chest x-rays will still be done by the Health Service on each student on arrival at the University. This is considered a necessary precaution for the protection of the group and is a service for the many students who come from areas where such service is not readily available.

The approval of this program by the executive committee of the Council of the Michigan State Medical Society is most gratifying. It is expected that the co-operation of the physicians of Michigan and other areas will help promote good teaching of preventive medicine and result in better doctor-patient relationships.

the efficacy and safety of Pentids have been confirmed by clinical experience in many millions of patients

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Squibb 200,000 Units Penicillin G Potassium

tablets (buffered)
bottles of 12 and 100

capsules (unbuffered)
bottles of 24 and 100
for infants and children

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'PENTIDS'® IS A SQUIBB TRADEMARK

New Site for Wayne County Medical Society



Milton A. Darling, M.D.

At an historic luncheon held in the headquarters of the Wayne County Medical Society on December 7, 1955, a number of members of WCMS met with the Detroit Board of Education for the formal signing of the lease giving the Society the privilege of constructing a new building—the plans for which have been completed—on the property of Wayne University Medical Center.

Signing the lease were Milton A. Darling, M.D., for the Society, and Mrs. Betty Becker for the Board of Education.

Speakers included President Darling, Mrs. Becker, Chairman of the day James J. Lightbody, M.D., and Past President J. Milton Robb, M.D. Dr. Robb recalled the struggles of the Society during the depression when funds dwindled to a point where paying rent in the Maccabees Building was a difficulty. Through the good auspices of the late Neil Hoskins, M.D., Dr. Robb and the late Frank A. Kelly, M.D., the Society was able — through the generosity of the Whitney family of Detroit—to move into the magnificent home at Woodward and Camfield which has been the headquarters of WCMS for twenty-three years.

Other speakers included Lawrence Reynolds, M.D., and Dean Gordon H. Scott, Ph.D., who expressed personal gratification upon seeing the fruition of one of his own "pet projects."

Closing the remarks was President Hilberry of Wayne University who spoke of the cordial relations that have existed between the University and Wayne County Medical Society and the medical activities of the University centering in the Society which had been highly instrumental in enlisting community support and furthering medical interests.

Other members of the Board of Education who were present were: Mrs. Alan Canty, Miss Louise C. Grace, Mrs. William Merrifield, Dr. Remus Robinson, and Mr. Edward M. Lane, Secretary. Also attending were members of the Board of Trustees of Wayne County Medical Society, The Council and a number of Past Presidents. Dr. Blain and Dr. Stapleton spoke on behalf of the Past Presidents. Members of the Building Committee also attended. Mr. Ward Culver, Dr. R. L. Novy, and Dr. Frank Weiser were special guests.

Blue Cross - Blue Shield Enrollment

All members of the Michigan State Medical Society and their full-time office assistants will again have the opportunity to get Blue Cross-Blue Shield hospital-medical-surgical coverage for themselves and their families during the once-a-year enrollment reopening that will run from March 10 to April 1.

Letters announcing the reopening, together with applications, enrollment instructions and a folder outlining details and rates of the coverages will be mailed to all members March 7.

This is also the time that enrolled subscribers may make changes in coverage.

Effective date for new subscribers and for changes in coverage made during this reopening will be May 1, 1956. The recent increase in Blue Cross rates of 33 cents a month for single subscribers and $1.14 a month for two-person and family contracts will become effective on that date (May 1) for members of the MSMS group.

For the convenience of those who will be attending the Michigan Clinical Institute on March 7, 8 and 9, Blue Cross-Blue Shield representatives will be available to furnish and accept applications at that time, even though it is a few days in advance of the official reopening period.

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Penicillin V, Crystalline
(Phenoxymethyl Penicillin)



*Trademark

the totally new penicillin for decisive oral dependability

- Formulated specifically for oral use
- Acid-stable—virtually unaffected by gastric acid
- Alkaline-soluble—optimally absorbed in duodenum
- Certain, high blood levels

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MSMS-Sponsored Radio Programs

The scientific radio program, currently being broadcast over approximately ten stations in Michigan under the sponsorship of the Michigan State Medical Society Scientific Radio Committee, includes the following forty presentations (past and future):

1955		
10/ 7	"The Hygiene of Pregnancy	Harold C. Mack, M.D.
10/14	"Management of Labor" "Anesthetics"	Tommy N. Evans, M.D.
10/21	"Care of the Newborn"	Bruce D. Graham, M.D. Ruth Carney, R.N.
10/28	"The Baby's First Year"	Ernest H. Watson, M.D.
11/ 4	"Feeding in the First Five Years"	Adelia Beeuwkes, M.S.
11/11	"The Cerebral Palsied Child"	James L. Wilson, M.D.
11/18	"Muscular Dystrophy"	Arthur L. Drew, M.D.
11/25	"Obesity-Dietitians-How to Reduce"	M. Isabel Foster, M.A.
12/ 2	"Obesity"	Holbrooke Seltzer, M.D.
12/ 9	"Arthritis"	William D. Robinson, M.D.
12/16	"Arthritis Research"	Ivan F. Duff, M.D.
12/23	"Physical Medicine-Rehabilitation of Arthritis"	George Koepke, M.D.
12/30	"Backache"	Carl Badgley, M.D.
1956		
1/16	"What Can We Do About Polio Today"	James L. Wilson, M.D.
1/13	"Rehabilitation of the Polio Patients" (Panel)	James W. Rae, M.D. David G. Dickinson, M.D.
1/20	"Juvenile Diabetes"	George Lowrey, M.D.
1/27	"Adult Diabetes"	Jerome W. Conn, M.D.
2/ 3	"Congenital Heart Disease"	Conrad Lamb, M.D.
2/10	"Rheumatic Heart Disease"	Leon De Vel, M.D.
2/17	"Acquired Heart Disease"	Donald C. Overy, M.D.
2/24	"Living With Your Heart Disease"	Franklin D. Johnston, M.D.
3/ 2	"Accident Prevention in Childhood"	Harry A. Towsley, M.D.
3/ 9	"Living with the Atom Bomb" (Panel)	James V. Neel, M.D. Henry Gomberg, Ph.D.
3/16	"Burns"	Paul Hodgson, M.D.
3/23	"What Abdominal Pain Means"	Robert Berry, M.D.
3/30	"Your Responsibility in Case of Accident"	Marion DeWeese, M.D.
4/ 6	"Skin Cancer"	Arthur C. Curtis, M.D.
4/13	"Cancer of the Female Generative Organs"	Norman Miller, M.D.
4/20	"Gastrointestinal Cancer"	H. Marvin Pollard, M.D.
4/27	"Lung Cancer"	Cameron Haight, M.D.
5/ 4	"Cancer of the Prostate"	William Baum, M.D.
5/11	"Multiple Sclerosis"	Russell DeJong, M.D.
5/18	"What Mental Health Means to Me"	Raymond W. Waggoner, M.D.
5/25	"Hearing"	Albert C. Furstenberg, M.D.
6/ 1	"Headaches"	Martha Westerberg, M.D.
6/ 8	"The Importance of Tuberculosis'	Winthrop N. Davey, M.D.
6/15	"Treatment of Tuberculosis" (Panel)	Herbert Sloan, M.D.
6/22	"Seasonal Allergy"	John M. Sheldon, M.D.
6/29	"Summer Skin Complaints"	Arthur C. Curtis, M.D.
7/ 6	"Adolescent Problems —Sex Education"	Ralph D. Rabinovitch, M.D.

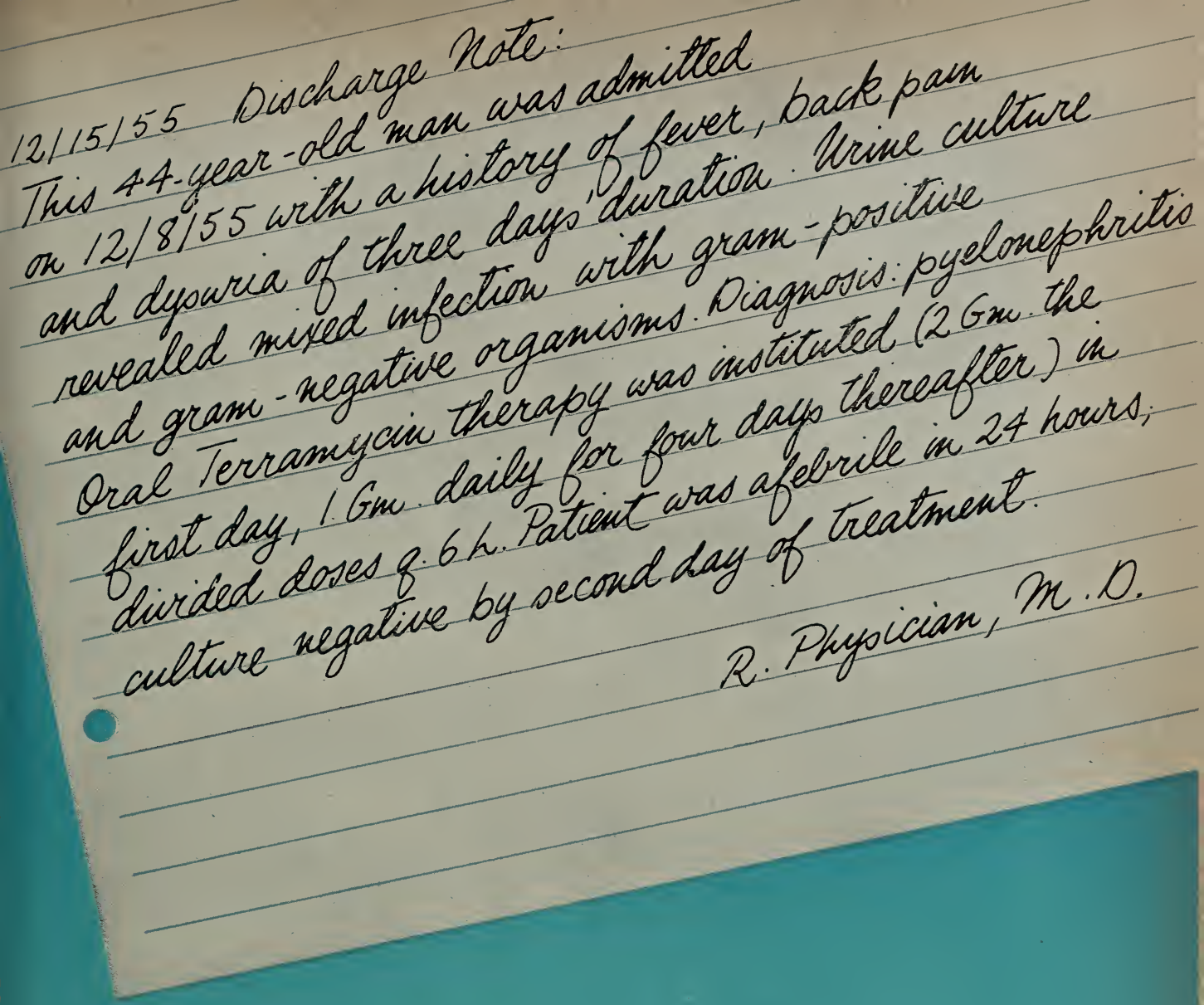
H. A. Towsley, M.D., Ann Arbor, chairman of the MSMS Scientific Radio Committee, reports that the above programs are being broadcast over the following stations: WUOM, Ann Arbor; WPAG, Ann Arbor; WBRM, Big Rapids; WDET, Wayne University, Detroit; WKAR, Michigan State University, E. Lansing; WLDM, Detroit; WMDM, Midland, and WFUM, Flint.

Public interest in these presentations is best exemplified by the following letter received from Larry D. Irey of Kalamazoo:

"I am twelve years old and I hope to become a future doctor. I am writing to tell you how much I appreciate your program Frontiers of Health on the University of Michigan hour. I have seen each one that you have presented and I have learned very much. I would like to congratulate you on the very swell job you are doing and also to Doctor Judge on his job as moderator."

THE DREAD DISEASE

As physicians we are best able to appreciate the plight of the cancer patient, and should be the first to combat the loneliness that can so quickly surround him. How much such an individual should be told of his condition has long been a subject of debate. Most agree, however, that he should at least be given some indication of the nature of his disease. Many should be told the truth, provided they are always given hope of recovery. It should be stressed that malignant disease is not incurable, that it is not communicable and that it is not due to misconduct or neglect. And always the patient must be made to understand that he, his family and their physician make up a team to bring the disease into the open, combat it and cure it.—*GP*, December, 1955.



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PR REPORT

A HAPPY ENDING to an unfinished story which appeared on this page in the December issue was finally written by the Legislature too late to meet the deadline for the January JMSMS. The story concerned the stalemate in the second special session of the Legislature called to consider the state's problems in the care of mentally retarded children. Although it's old news and Michigan is now deep into the 1956 regular legislative session, the final chapter of the special sessions should be recorded here if only to illustrate the co-operation possible in our state government when the Legislative and Executive branches both put forth an effort.

In mid-December, the six-man conference committee representing both the House and the Senate came up with a "compromise plan" after careful examination and evaluation of all the proposals offered for the care of mentally retarded children. The weeks of controversy ended with the adoption of this committee report and the enactment of emergency legislation providing for the placement of some 1,500 children awaiting admission to state institutions, without committing the state to the purchase of facilities which were not considered desirable under the long-range program already in effect.

As finally worked out, the state agreed to lease and remodel Fort Custer hospital buildings to accommodate 800 patients, to increase the Mt. Pleasant and Coldwater state homes and training schools by a combined total of 350 beds, to institute a "family-care" program for 100 retarded children, and to contract for the hospitalization of 250 more in non-state facilities, including 150 at Farmington Hospital. Much of the credit for this solution was attributed to Senator Elmer R. Porter of Blissfield.

USE OF RADIO BY COUNTY MEDICAL SOCIETIES for public education continues to increase. At the first of the year two societies inaugurated their own fifteen-minute shows, recorded in advance at the convenience of participants. In both instances the MSMS Public Relations Department and field staff offered maximum assistance.

The Saginaw County Medical Society is presenting a weekly series of thirteen quarter-hour broadcasts on timely medical topics each Wednesday at 7:15 p.m. over WSGW, Saginaw. The Oakland County society has arranged for three monthly shows over WPON, Pontiac.

The largest potential listening audience for any of the current medical broadcasts in Michigan is provided by WJBK, Detroit, which is using the excellent "Why Do You Worry?" series recorded by the American Medical Association. It is heard at 5:15 p.m. each Sunday. This program is presented by the Wayne County Medical Society, in co-operation with MSMS. In Lansing, this same series is now heard over WILS as an Ingham County-Michigan State Medical Society joint venture.

"Why Do You Worry?" also will be heard in the Monroe area when its new station, WMIC, goes on the air in March.

In addition to the new programs listed above, twenty Michigan radio stations now carry other regularly scheduled broadcasts under auspices of local medical societies and MSMS.

CLOSED CIRCUIT TELEVISION as a technique for bedside medical teaching was inaugurated in January in the Grand Rounds series, beamed to doctors of medicine in fifty major cities under sponsorship of The Upjohn Company of Kalamazoo. In Detroit the initial show, which originated at Tufts School of Medicine, was presented in the Oak Room of Masonic Temple. The adaptation of TV to the historic bedside technique was announced as a means of offering to the physician in practice "a unique opportunity to observe distinguished clinicians and to test his own acumen against that of the specialists."

Edwin S. Hamilton, M.D., Board of Trustees, AMA: "I think I am not giving away any secret when I tell you that, individually, they (survey committee) found the medical profession is not in such bad repute, but as an organization—and that means on both state and national levels—we do not have the same respect by the laity. We found that this was quite universal or national, even from Washington down to Kankakee. It didn't surprise us, but we didn't know everybody, or a large majority, felt that way."



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AMA Washington Letter

THE MONTH IN WASHINGTON

Bills that have been hanging fire in Senate and House Committees for over a year finally are getting attention as the Administration pushes its program for broader and more uniform medical care for the families of servicemen.

A new version of a bill was dropped in the hopper on the opening day of this session by Chairman Carl Vinson of the House Armed Services Committee. It was designed in part to supply answers to a number of questions growing out of earlier versions sponsored by the Defense Department. Actually it raised more questions, which only hearings and testimony from expert witnesses and debate on the floor of Congress can answer.

The bill (H.R. 7994) authorizes, as a matter of right, broad medical care for dependents of the armed forces as well as of Coast Guard, Public Health Service and Coast and Geodetic Survey personnel serving on active duty. (The bill would authorize health insurance only for dependents of latter three services). Separate bills have been introduced in the past providing medical care for dependents of Coast Guard, PHS and Geodetic Survey, but this marks the first time they are brought into the same bill with military personnel.

In provision of services, the bill has no surprises over its predecessors. It calls for diagnosis, treatment of acute medical and surgical conditions, treatment of contagious diseases, and maternity and infant care.

On another point of major interest to physicians, the bill drops out all mention of the home-town medical care plan, which was a part of Mr. Vinson's earlier bill. That bill contemplated use of civilian hospitals and doctors for those dependents who were not near military medical facilities and who had not taken out health insurance, with the government paying part of the cost.

Another area of almost certain debate in the latest bill is the insurance features. There are these main points:

1. A serviceman may elect to rely entirely on the chance of finding space available in a military hospital or clinic for his family, or he may choose protection through an insurance plan.

2. The family deciding on insurance has its choice of going to a military hospital or using civilian resources. The uninsured family could be charged by the military for out-patient care, and would have to pay subsistence costs while in the hospital.

3. A serviceman taking insurance would pay 30% of monthly premiums for a basic plan covering his wife and children, and the entire premiums for coverage of dependent parents and parents-in-laws. Parents and parents-in-law who found space in a military hospital, however, would be admitted on the same basis as wives and children.

4. Catastrophic-type coverage, at additional premium.

5. To take care of long term illnesses, the bill provides for transfer of dependents to military facilities once they have used up benefits in an insurance plan. Or if such transfer isn't feasible, the government could pay the additional costs for private care.

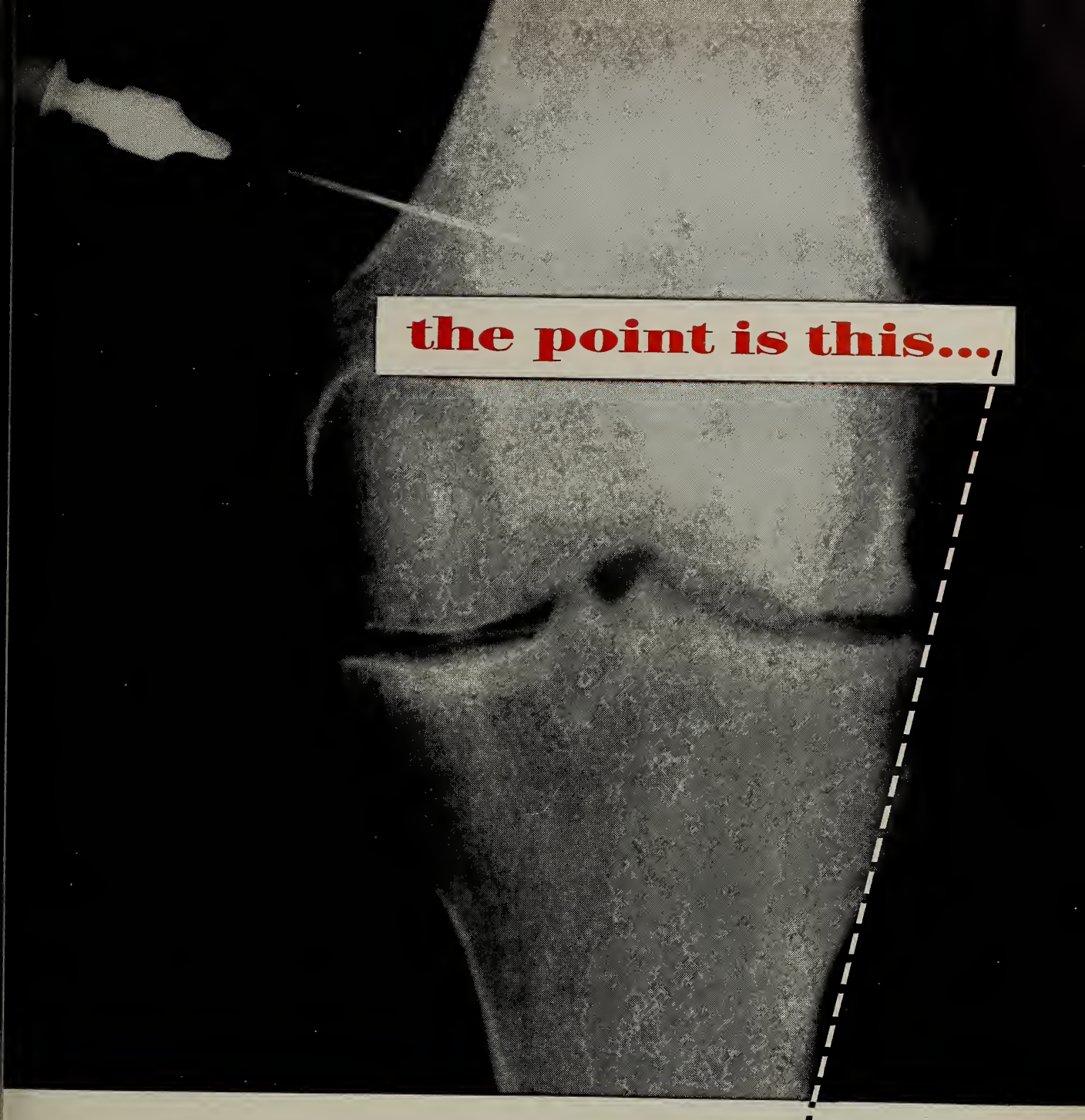
The bill was introduced before the Defense Department had completed a survey of Blue Shield, Blue Cross and commercial plans to determine to what extent they could provide care under the bill. Conceivably the survey could further change the shape of an already much-revised piece of legislation.

President Eisenhower in his State of the Union message summed up the case for dependent medical care this way: "Much has been done to attract and hold capable military personnel, but more needs to be done." He also broadly outlined administration plans in the health field, with emphasis on more money for research and federal aid to medical schools and to private research facilities for construction. With bipartisan bills along this line already before Congress, these proposals may move right along before adjournment in midsummer.

However, Congress might decide that for this year medical schools should settle for the $90 million of Ford Foundation money being made available to private schools to help strengthen teaching staffs.

By the same token, there was some question just how much Congress would vote for Hill-Burton hospital programs this session in the light of the $200 million Ford grants to some 3,500 nonprofit hospitals.

A recent Public Health Service report indicates that states are now showing less preference for "public" Salk vaccine programs than they did a few months ago. The sixth allotment marked the high-point in "public" preference. Then came a slight but steady decline.



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Editorial Opinion

KEEPING THE BLUE CROSS OUT OF THE RED

Elsewhere in this issue, we publish a "Memo from Blue Cross." You will find it on page 539. Several of the statistical items seem to leap out of the cold type and hit us doctors right in the eye. For instance, the hospitalization incidence (admissions per thousand enrollees) skyrocketed in the last four years from 95 to 123. It seems hard to believe that the ratio of hospitalizable illness incremented more than 20 per cent—but there are the figures! Then, too, average length of hospital stay has somewhat surprisingly, started to climb. For years, it has been medicine's boast that, between ambulation and wonder drugs, the average hospital stay was getting shorter. Now this trend seems to be reversing. And, like everything else, the *per diem* [cost] is on the upgoing elevator too.

Doctors can't control the *per diem* [cost] (except by avoiding needed tests and procedures, and no one asks them to do that). But doctors have some control over the decision to hospitalize or keep at home an ambulatory patient. And they have some control over the discharge date. There are a quarter of a million hospital patients annually in New Jersey. A decision to send the patient out on Friday, or let him take it easy there until Monday, may add three days to the stay. If this is done on all patients, the burden on Blue Cross is upped by some 700,000 days a year! This adds up to something for an agency like Blue Cross, that pays back 91 per cent of its income.

The lesson can be colorful. The cross is blue, the books get red, the goose is golden. No sense in killing so gold a goose.—From *The Journal of the Medical Society of New Jersey,* October, 1955.

BLUE SHIELD PARTICIPATION

The Grievance Committee of the New York County Medical Society in an extensive report early this year stated: "The practice of some physicians to ask for higher fees from a patient legitimately entitled to Service Benefits, when the Doctor is a participating physician in Blue Shield endangers the whole concept of voluntary health insurance and low cost medical care for low-income patients."

United Medical Service, the New York Blue Shield plan, had a provision requiring subscribers to notify their physicians that they had Blue Shield Service Benefits so that the doctor would understand. Since the report quoted, the U.M.S. with understanding and approval of the Medical Society Reference Committees, and the Medical Policy Committee, has abrogated the notification request. They will, however, advertise and urge their subscribers to discuss fees and services with their doctors at the first visit.

Another change of procedure is announced: "Participating physicians make it possible for Blue Shield to exist, yet derive no more benefits from Blue Shield than non-participating physicians. In order to remedy this situation U.M.S., with the approval of the Medical Societies Reference Committees, and the Medical Policy Committee of the U.M.S., has decided that in the future only participating physicians will be paid directly. When care has been rendered by a non-participating physician the check will be sent to the subscriber."

Most of us who remember the practice of medicine in the days before the prepayment plans know from sad experience that many of those checks never reached the doctor who rendered the services. Some other pressing need too many times appeared. Our prepayment plans were instigated to help the *low-income* families who could not pay for either doctor or hospital, except in rare cases. and then by great sacrifice. Those were the ones most in need. The other and more fortunate persons just joined with groups. [In Michigan we recognized the right of the doctor to charge his regular fees to over-income members if more than the schedule.] The low income group is still with us and should be completely and efficiently cared for. New York is attempting to right a grievous wrong.—Adapted from *Journal of the New York Medical Society,* (Nov.) 1955.

Swelling, limitation of motion, and slight pain are the earliest complaints in giant cell tumors.

* * *

A careful case history, a painstaking inspection, and a thorough palpation are the fundamental methods of diagnosis of genitourinary tumors.

* * *

The predominant sign of bladder neoplasm is gross hematuria, which is the first indication of disease in about 75 per cent of cases.

* * *

Although most bladder carcinomas are radiosensitive, irradiation seldom accomplishes complete sterilization of these tumors.

* * *

Metastases of bladder cancer occur most often to the pelvic and periaortic lymph nodes, the lungs, lumbar spine, and pelvis.

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

VOLUME 55 FEBRUARY, 1956 NUMBER 2

Frontiers of Health

By A. C. Furstenberg, M.D.
Dean, University of Michigan Medical School

WHEN one reads of advances in medicine he gets the impression that frontiers of health are fading so rapidly that man can expect within the next generation or two the ultimate disappearance of disease.

Frontiers, however, don't fade. They change.

Recently, I read the comments of an observer of medicine in a weekly news magazine. He wrote, in effect, that the current and somewhat careless use of statistics is leading the layman to believe that progress in medicine can mean only one thing: victory over death. Then the observer wrote that even though deaths from one cause might be decreasing dramatically, deaths from other causes of necessity must be increasing.

Medical statistics must always add up to 100 per cent. What we do for victims of cancer, we do not do for victims of automobile accidents; where we succeed with infectious diseases, we are statistically embarrassed by coronaries; and although we may reduce the percentage of prenatal accidents, the colony of hypertensives continues to expand.

This is the physician's paradox, and it forces him to be humble. This is the doctor's dilemma, and it compels him to be courageous. This is also the scientist's frustration, but he must keep the faith.

There is another side to the irony of medicine. It is the relentless effort which we doctors must exert in the laboratories, at the bedside, and in the classroom in the face of a known and certain amount of defeat. We doctors know that complete victory is impossible, but we also know that anything short of complete dedication is equally impossible.

For these reasons, I believe that today's clinician must protect himself against unwarranted self-satisfaction and unnecessary cynicism. We can all take great moral strength from the laboratory scientist who may labor a lifetime for uncertain rewards. His wages are modest, and his little achievements, if not attributed to someone else, are often forced into obscurity.

The popular distinction between "basic" and applied research has given all of us the false impression that one is more significant than the other. Without the information and knowledge accumulated in the laboratories, we might come to rely on charm rather than on facts.

The human resources for continued research into basic problems of medicine are everywhere to be found, if we would but adopt the search for them as part of our professional obligation. A potentially brilliant biochemist may be hidden in some remote high school classroom.

The frontiers of health do not fade. They change, and they challenge. Today one of the most challenging frontiers is the discovery and exploitation of human talent which is "out there somewhere." We must search for this talent, and we must subsidize it to the limits of our generosity so that such investigators can work with a minimum of economic anxiety.

We must do one thing more. Once we have found it, we must have a defeatless faith in the purposes to which such scientific talent is dedicated. We will fail from time to time in matters of life and death, but we must never fail to pursue knowledge and wisdom for their own sake.

We owe a deep debt of gratitude to men of medical research, and we must never fail to express this gratitude.

Advances in Internal Medicine

By Cyrus C. Sturgis, M.D., Fred M. Davenport, M.D., Winthrop N. Davey, M.D., Sibley W. Hoobler, M.D., Franklin D. Johnston, M.D., H. Marvin Pollard, M.D., and John M. Sheldon, M.D.
Ann Arbor, Michigan

IN RECENT years important advances have been made regarding the etiology, diagnosis and treatment of many diseases. In this paper, a few of the most important ones will be summarized briefly.

Hematology

Iron Deficiency Anemia.—Iron deficiency anemia is the type most commonly encountered and is usually due to chronic hemorrhage. In women this is most frequently due to menorrhagia and in men to bleeding from the gastrointestinal tract. When one observes a hypochromic anemia, the source of bleeding must be found and controlled. Such an anemia is best treated with iron orally in the form of ferrous sulfate, 0.3 gm. (5 grains) in enteric coated capsules before meals. If gastric symptoms develop, the medication should be given following meals; when they persist, then only one or two doses of 0.3 gm. each should be given daily.

Simple Chronic Anemia.—This variety of normochromic, normocytic anemia is usually due to persistent chronic infection. Ordinarily it is not severe, as the red blood cell count is rarely less than 3.0 per cubic millimeter and the hemoglobin about 10 grams. The most common site of infection is the urinary tract. With elimination of the infection, the blood will return to normal. When the anemia is severe, one or more blood transfusions may be given.

Pernicious Anemia.—The cause of this anemia is thought to be a decreased rate of red blood cell formation in the bone marrow. This is due to a diminished amount of vitamin B-12 which controls the rate of erythrocyte development. The deficiency arises because vitamin B-12 (the extrinsic factor) in the food is not absorbed in normal amounts as the result of a deficiency of the intrinsic factor in the gastric secretion. The treatment is to administer vitamin B-12 intramuscularly in doses of 15 to 30 micrograms daily for ten to fourteen days, and thereafter once a week until the blood returns to normal. For most patients, the maintenance dose is 30 micrograms given intramuscularly once every thirty days. Folic acid should not be used in pernicious anemia as the neurologic manifestations are not benefited, and some claim that it may cause harm. No form of therapy is needed other than adequate amounts of vitamin B-12. If neurological changes are not present, they will not develop when this form of therapy is given and if such changes have been present for not more than one year, they will usually improve. Recently, oral preparations composed of vitamin B-12 and a concentrate made from hogs' stomach have been used. One such preparation is Biopar.® In my experience, although these products are potent, they are not as reliable as vitamin B-12 when given parenterally.

Leukemia.—Leukemia of any type is an invariably fatal disease. Recently various types of therapy have been introduced which often cause dramatic but temporary improvement. Chronic myelogenous leukemia is best treated with total body irradiation. If the spleen is greatly enlarged, then localized treatment should be given over this organ. Radioactive phosphorus (P-32) has an action similar to total body irradiation and is more convenient to administer. It does not, however, produce superior results. In the past few years, various antimetabolite drugs have been introduced which cause temporary benefit in patients with acute and subacute forms of the disease. Patients with this disease who have prostration and a high fever, however, should first be treated with Meticorten in doses of 15 milligrams four times daily, or an equivalent amount of cortisone. Although initial effect is gratifying, eventually relapses occur and finally the patient becomes refractory to the drug. The 6-Mercaptopurine in doses of 50 to

From the Department of Internal Medicine, University of Michigan Medical School, Ann Arbor, Michigan.

150 milligrams daily may be given with satisfactory results. About one-half of the children and thirty per cent of the adults are improved greatly but temporarily with these drugs. Infections as they arise should be treated with antibiotics, and repeated blood transfusions are usually indicated.

Anemias of Pregnancy.—During all pregnancies there is normally a decrease in the red blood cell count and hemoglobin, due to an increase in blood volume. In the third trimester of pregnancy, the hemoglobin may be as low as 10 grams (64 per cent) and the red blood cell count may decrease to 3.5 million per cubic millimeter. These are normal values in pregnancy and no treatment is indicated. Occasionally a patient may develop pernicious anemia of pregnancy in which the blood picture resembles true pernicious anemia. This condition is not benefited by vitamin B-12 therapy, but is readily controlled by oral folic acid when given in doses of 10 milligrams three times daily. A more common type of anemia in pregnancy is one of iron deficiency which yields promptly to adequate iron therapy.

Use of ACTH and Cortisone.—In two hematological conditions, idiopathic hemolytic anemia and idiopathic thrombocytopenic purpura, steroid therapy has a specific action. We have employed cortisone chiefly in doses of 75 milligrams four times daily or Meticorten in doses of 15 milligrams four times daily in these conditions. In the hemolytic anemia of this type, a beneficial effect resulted in almost all cases. When the blood returned to normal, the treatment has been omitted and the patient kept under observation. About 90 per cent of the patients have relapsed, and in these the drug has been given again, and the spleen removed. Following splenectomy the condition is controlled in about 80 per cent. In patients with idiopathic thrombocytopenic purpura, the blood may become normal in all respects with steroid therapy; when the drug is omitted, however, all but about 40 per cent of the patients relapse. In the latter, splenectomy controls the condition in about 84 per cent.

Infections and the Use of Antibiotics

Antibiotics.—Reviews of various phases of antibiotic therapy appear periodically in the *Annual Review of Biochemistry, Annual Review of Microbiology, Annual Review of Medicine,* and in the *Archives of Internal Medicine* and numerous other sources. It is not the purpose of this article to summarize currently accepted antimicrobial practices which soon may or may not be superseded. Rather the purpose is to emphasize basic principles requisite for the successful management of infectious diseases. Confidence in the validity of these principles has been derived from experiences with the "treatment failures" which are referred to the University Hospital. The eventual successful management of these patients can usually be ascribed to fulfillment of the following principles.

Daily experience demonstrates over and over again the importance of a carefully taken and thoughtfully analyzed history, and the irreplaceable value of a thorough physical examination. From the information derived thereby, and a knowledge of pathogenesis in infections, it is usually possible to arrive at a tentative clinical diagnosis. This is the first principle of successful antibiotic therapy—a working diagnosis is a prime requisite for proper selection of appropriate antimicrobial therapy, since eradication of infection by antibiotics is dependent upon the type and locus of the lesion and the characteristics of the organism involved.

The second principle is the necessity of confirming clinical impressions by appropriate laboratory diagnostic aids. Few, if any, infections require treatment before materials can be collected for future analysis, but many are the cases referred because the patient failed to respond to treatment for a hypothetical infection or was inadequately treated for an infection caused by an uncommon or resistant organism.

Thirdly, the bacteriology laboratory can offer critically important guidance to therapy provided that appropriate specimens are submitted, and the sensitivity of organisms responsible for infection are determined. This phase of planning treatment becomes especially important when strains of staphylococci, streptococcus viridans, or Gram negative bacilli are responsible for illness. In these circumstances not only is choice of antibiotic important, but the precise combination of antibiotics which yield maximal killing power can often be demonstrated by *in vitro* tests.

Finally, if the patient does not respond to a treatment program selected on the basis of laboratory confirmation of the clinical diagnosis and guidance in the choice of antibiotics, it is wise to increase the dose of antibiotics to the maximally tolerated limit. Some patients whose infecting organism appears discouragingly resistant by *in vitro* tests are cured by increasing the amount of antibiotic used. This situation is especially true for strains of organisms apparently resistant to penicillin.

It may seem incongruous to reiterate these simple principles, but in the past year no new antibiotic of proven value has appeared, and hence it seems more likely that immediate improvement in antimicrobial therapy will come about by a more

widespread adherence to principles of tested and proven usefulness.

Poliomyelitis.—The progress made in the prevention of poliomyelitis by vaccination, as reported in 1955, is a milestone on the way of medical science. The principle has been firmly established that a killed virus vaccine can induce protection against a virus disease which produces its effects by distant invasion from the portal of entry. It has been clearly shown that antibody produced by vaccination can block the invasion of the central nervous system by poliomyelitis virus, even though superficial infection of the gastrointestinal tract occurs. Thus the exposed vaccinated person is protected, although he may serve as a transmitter of virus potentially hazardous to unvaccinated susceptibles in the community. It seems likely that in the near future control of poliomyelitis will entail the vaccination of that segment of the population which does not possess antibodies to all three types of poliomyelitis virus. Serologic studies on the epidemiology of poliomyelitis have shown that the rate, by age, at which antibodies to poliomyelitis virus are acquired from infection, differs from place to place. Thus the requirements for vaccine can be expected to vary from area to area. Current evidence indicates that a safe vaccine of proven potency can be provided. Its use will reduce the incidence of paralytic poliomyelitis. While in limited supply, its use should be reserved for those at greatest risk.

APC Virus.—Important advances in the understanding of viral diseases of the respiratory tract have resulted from the isolation of the "APC" group of viruses, and their identification as etiologic agents in ARD (acute respiratory disease—an influenza-like syndrome most commonly recognized in recruit training centers), exudative nonstreptococcal pharyngitis, and pharyngoconjunctival fever. These viruses do not cause the common cold. Their relationship to frequency of illness in the general population is still to be accurately assessed. Nevertheless, the frequency of antibody to these agents rises with age, and it is tempting to speculate that many of the non-influenzal "grippe"-like illness seen in a busy practice may be related to infection by one of these viruses. If so, the outlook is encouraging, for vaccines have been prepared against some of the APC viruses, and the possibility of protection against infection with them is under study.

Tuberculosis

During the ten years since the advent of streptomycin in the treatment of tuberculosis, there has been a significant decrease in the average period of hospitalization and a 75 per cent reduction in deaths from this disease in the United States. Though it is generally agreed that the management of tuberculous disease should be initiated on an in-patient basis, the continuation of treatment routinely is effected in out-patient departments. Differences of opinion persist as to the degree of bed rest that is suitable. Most patients are treated on a modified regimen.

The use of antituberculous drugs seems indicated in all patients with active tuberculosis. Combination therapy appears optimal, two drugs being as satisfactory as three or more. The most widely accepted combinations are those of streptomycin, 1.0 gm. twice weekly, with para-aminosalicylic acid, 12.0 gm. daily, and isoniazid, 200 to 300 mg. daily, with PAS daily. Streptomycin and isoniazid in combination are reserved principally for the acutely ill and those intolerant of PAS. Other antituberculous drugs are available. Viomycin 2.0 gm. twice weekly is a satisfactory agent for use in combination with PAS or isoniazid when the patient is intolerant or tubercle bacilli resistant to other agents. Oxytetracycline may serve as a substitute for PAS. Pyrazinamide and cycloserine are under investigation.

The use of tuberculostatic chemotherapy should be prolonged. A minimum of one year of continuous combination therapy is accepted. Most patients receive treatment for eighteen to twenty-four months. The careful evaluation of sputum and the performance of *in vitro* susceptibility studies on the organisms recovered are mandatory. Methods of reversible collapse therapy are not widely employed. Some clinics continue to use pneumoperitoneum especially for treatment of bilateral cavitary pulmonary involvement.

Better surgical techniques and superior methods in anaesthesiology have permitted tremendous strides in the surgical intervention in patients with pulmonary tuberculosis treated with antituberculous drugs. Though irreversible collapse of the thoracoplasty type continues important most surgical therapy is excisional. The majority of patients are receiving segmental resections. Debate

continues as to the indications for excisional surgery. The well-stabilized non-cavitary residual disease appears to relapse no more frequently after prolonged chemotherapy than does the remaining disease in resected cases. Persistence of cavitary disease positive sputum or well localized residual necrotic foci, however, constitute indications for surgery. Only the significant areas of disease are excised, if this is possible. Sometimes bilateral resections are performed. Pulmonary function limits markedly the use of surgical therapy for extensive disease and in the older patient.

Extrapulmonary tuberculosis responds well to antituberculous chemotherapy. The mortality from miliary and meningeal tuberculosis has been reduced markedly. The value of the prolonged use of these drugs for renal, osseous, enteral and lymph node involvement has been firmly established. Surgical intervention in osseous disease usually is indicated, but this is less commonly necessary for renal involvement.

Tuberculous disease continues to present a challenging problem to the medical profession. Eradicative therapy is the eternal hope. The life expectancy of tuberculous patients has been extended, but this is resulting in an increasing prevalence of the disease in our communities.

Hypertension

Etiology and Prognosis.—From the clinical standpoint no major advances in our understanding of etiology or pathogenesis have appeared recently. Wide acceptance has not been accorded the view of Pickering[1] that high blood pressure is not a disease but a graded individual characteristic conditioned by heredity and environment. Death from this condition is the result of the vascular damage which unusually high and sustained blood pressure engenders in the individual so unfortunate as to carry blood pressure levels higher than the average. His writings do, however, conform to the majority view that sustained high blood pressure does induce vascular disease and that blood pressure reduction, by whatever means achieved, will prolong life. As would be expected, the prognosis varies widely but in general parallels the magnitude of the vascular complications.[2,3]

Treatment.—There continues to be wide differences of opinion concerning the usefulness of various regimens. For the milder cases, *rauwolfia alkaloids* in properly applied and maintained dosage are agreed to lower the blood pressure more than 20 mm. in about 50 per cent of cases. Sometimes the results are dramatic. It is less effective in cardiac disease and should be used only in conjunction with other more potent agents when the accelerated or malignant form is being treated. Depressive states are the only serious side effect of rauwolfia therapy, but this reaction is fortunately rare.

Hydralazine and *veratrum alkaloids* have generally lost favor as more potent agents have been introduced. Apresoline® is used in combination with ganglionic blocking agents by some clinics,[4] but little convincing evidence has been presented that the depressor action of the combination is superior to that of the ganglionic blocking agent given alone.

Sympathectomy has lost favor in most clinics, but accumulating survival statistics still indicate it is the only form of therapy which, when successful in reducing blood pressure, is known to prolong survival in all forms of the disease.[5] At the University Hospital it remains the treatment of first choice in the young person with severe hypertension, the patient with early neurological signs or symptoms, or the malignant hypertensive; not because it has peculiar virtues in itself but because it seems the most effective way of lowering the blood pressure continuously in many persons unwilling or unable to submit to prolonged and arduous medical treatment. Significant and lasting improvement will occur in at least 40 per cent of patients operated upon by the more extensive one-stage procedure recently introduced at the University of Michigan Hospital by Dr. Edgar Kahn and his associates.[6]

Prompt blood pressure reduction is now considered mandatory in patients with severe degrees of hypertension (i.e. exceeding 130 mg. Hg diastolic) who have (1) hypertension with papilledema or fresh retinal exudates (provided the NPN does not exceed 80 to 90 mg. per cent) and (2) severe hypertension with left ventricular failure or with focal cerebrovascular episodes either transient or with minor residuals. Such reduction is probably advisable when the blood pressure is equally high in a young individual even before a vascular lesion has developed. While a sympathectomy when successful is the most satisfactory method of inducing a persisting and significant blood pressure reduction, *ganglionic blocking agents* such as pentolinium (Ansolysen®) are more com-

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monly used for this purpose. The therapeutic aim is to increase the daily dosage to such a level that the patient's minimum standing blood pressure, taken at the time of maximum effect after each dose, has fallen to the lower tolerated levels (usually 120 to 140 mm. systolic).[7] If absorption is variable by the oral route, 1/20th or less given by injection may be effective.

Recently, an isoindoline derivative (Ecolid®)* has been introduced which has a more prolonged action (twelve hours), is more dependable, but affects vision more markedly. The equivalent of one-third of the total daily dose of Ansolysen® given morning and night are sufficient in the average patient to achieve blood pressure control, but tolerance and the side effects of ganglionic blockade are still troublesome. Sometimes, to bypass the constipating effects, Ecolid® may be given by injection twice daily in 1/10th to 1/20th of the oral dose. Because of its longer action span, this form of treatment is generally the most effective in managing cases resistant to other drugs or routes of administration.[8] Here again the dose must be increased until the minimum standing blood pressure (usually one hour after subcutaneous injection) is below 120 to 140 mm. Hg systolic.

Finally, in the opinion of this reviewer, the most useful ganglionic blocking agent to be introduced is mecamylamine (Inversine®).**[9] This drug is completely absorbed when given by mouth and has such a gradual onset and offset of action that a continuous and effective level of blockade can readily be achieved by 10 to 15 mg. twice daily. Parasympathetic effects are still prominent, however, and the patient must accept them as the inevitable consequence of effective treatment. The decision to use ganglionic blocking agents should not be made until the doctor is convinced they are necessary for prolongation of life. Then the most effective regimen must be promptly commenced and the effect monitored constantly by doctor and patient, preferably by instructing the latter in the taking of his own blood pressure and in controlling the daily dosage accordingly. That the life of a patient with malignant hypertension, for example, may be prolonged almost indefinitely by such treatment, is the most important recent advance in the field of hypertension.

*Frederick Yonkman, M.D., Ciba Co., Summit, N. J., supplied the Ecolid used in the investigations quoted.

**Sharpe & Dohme, West Point, Pennsylvania, has provided Inversine for the studies reported herewith.

Heart Disease

Congenital heart disease continues to be a very active and rapidly expanding field. Surgical techniques for the closure of septal defects and correction of other intracardiac lesions have been devised, but there is not general agreement as to the best methods to be employed. It seems likely that safe and simple methods for temporarily substituting some kind of source of oxygenated blood for the heart, thus allowing the surgeon to open the heart and correct one or more intracardiac defects in a bloodless field, will be the final answer to many of these problems. Lillehei and associates at Minneapolis have made great progress in this direction, and cross circulation techniques, possibly combined with hypothermia, seem to offer great promise.

Rheumatic heart disease is still a major problem. Surgical treatment for rheumatic valve lesions, especially mitral stenosis, has become an accepted part of treatment, and many patients have been greatly benefited by surgery. Operative results are generally good today because of improved criteria for selection of patients and better surgical techniques. Although surgery offers much to patients with chronic rheumatic heart disease, it is not the answer to the whole problem. This may, however, be found in the prevention of initial attacks and recurrences of acute rheumatic fever. Due to the work of Rammelkamp and others we already have the tools to do the job, but the big difficulty is putting the tools to work adequately. Rheumatic fever can be prevented by early and proper treatment of beta hemolytic streptococcus infection with penicillin or other antibiotics. Only widespread co-operative programs involving physicians, public health and nursing agencies, schools, particularly the teachers, parents, and even the children, can achieve success in this very important endeavor.

Hypertensive heart disease will be treated successfully only when adequate therapy for essential hypertension is discovered. Although the hypotensive drugs and other types of treatment increase the life span and offer considerable symptomatic benefit to this large group of patients, current management of hypertension is unsatisfactory and probably will continue to be until its cause is more completely known. Only then can specific, curative treatment be developed.

Coronary artery disease and atherosclerotic vascular lesions in other vital organs have been the subject of intensive study and innumerable papers

in recent years. The blood cholesterol, other lipids in the blood, and the endocrines, particularly male sex hormones, have been pointed to, sometimes in dramatic fashion, as predisposing or causative factors in these degenerative vascular disorders. At the present time, however, it is doubtful if rigid restriction of cholesterol intake in the diet, attempts to reduce other lipid fractions in the blood, or efforts to make women out of men are justified. It has been well said that Americans and other highly prosperous groups are eating themselves into their graves; and whether coronary disease is related to overeating of animal fats or to other things, there can be little doubt that all of us, especially individuals with coronary disease or history of coronary disease in the family, should avoid obesity.

Gastroenterology

Contributions in the field of gastroenterology, while rather diversified through the past two or three years, seem to have centered upon lesions of the esophagus, disturbances of absorption in the small bowel, treatment of liver coma and diagnosis of portal hypertension.

Peptic Esophagitis.—Clinical evaluation along with closer endoscopic studies of the esophagus, more careful attention by radiological techniques and physiological observations have shown that peptic esophagitis is not uncommon. This disease is dependent upon regurgitation of gastric contents through a patent gastric cardia into the lower portion of the esophagus. Any condition producing a patent cardia is capable of permitting this passage of gastric contents into the lower esophagus. Such conditions as hiatus hernia, surgical procedures on the esophagus, aberrant gastric tissue and the loss of tone constitute etiological factors. These patients develop a burning sensation on swallowing, which is characteristically accentuated at night after going to bed. It may be relieved by alkali although not consistently so. Seldom does the disease become serious, but it can prove most annoying and disturbing. The diagnosis is established most readily by a careful radiological examination of the esophagus showing the corkscrew appearance of the lower portion of the esophagus, sometimes associated with a hiatus hernia. Esophagoscopy is distinctly important in the establishment of the diagnosis, particularly when a biopsy is obtained and neoplasm is eliminated. Therapy is largely that of neutralization of the stomach contents and frequent small feedings. One item of distinct value is to have the patient sleep in a head-up position at night; this mechanically prevents bathing of the lower esophagus with gastric juice. Surgery can be employed, but most cases will respond without it.

Pancreatic Function Tests.—It still remains true that pancreatic function tests are difficult to interpret and somewhat inefficient. Yet, coupled with the clinical picture, their use is imperative. Since disturbances of carbohydrate metabolism are the most common abnormality, a glucose tolerance test should be performed whenever possible. The serum amylase, lipase, and urinary amylase also have some value. The most recent test, introduced by Althausen, a so-called "starch tolerance test," involves the administration of 100 grams of starch in water followed by determination of blood sugar at regular intervals. This makes it a comparatively simple test, although the starch is sometimes difficult for the patient to tolerate.

Gastric Carcinoma.—The one diagnostic feature that is still attracting interest is that of cytological examination. Newer techniques are being employed with some encouragement. When the carcinoma cells can be clearly identified in clumps from the gastric washings, diagnosis can be established. The whole procedure, however, remains somewhat cumbersome and technically difficult and for that reason has not achieved great popularity. Progress is being made in the field of tubeless gastric analysis through the use of Diagnex and Azure-A. Further information needs to be obtained regarding the efficiency of such a test, but in a preliminary way it appears that achlorhydria can be accurately determined by this tubeless method.

Liver Disease.—The splenoportogram has been of invaluable aid in establishing the diagnosis of portal hypertension and in the selection of cases suitable for shunt operations. It is true that this procedure is carried out in a limited number of radiological laboratories. However, where the technique can be accomplished, the portal system can be visualized effectively and the collateral circulation can be demonstrated. In the presence of portal hypertension, the dye is delayed from entering the liver and instead is readily visualized in the

collateral system. The esophageal varices can be demonstrated by this technique much more often than they can be visualized by direct endoscopic examination.

Peptic Ulcer.—The management of peptic ulcer remains very much the same. Care should be taken in patients receiving any of the steroid preparations for fear of reactivating any ulcerating disease of the gastrointestinal tract. However, with some care, diet and alkali, the danger is minimal. The anticholinergic drugs have been of value, but the physician should be cautioned to use all the other forms of diet and medication, in addition to the anticholinergic drugs and not depend upon drugs alone for the medical therapy in gastric and duodenal ulcer.

Arthritis and Rheumatic Diseases

The rheumatic diseases have attracted increasing attention in the past decade. For rheumatoid arthritis, an average of two or three new methods of treatment, hailed as important advances, are published in the medical (and lay) press each year. Enthusiastic trial of the suggested remedy is to be expected as long as rheumatoid arthritis remains a disease of unknown etiology and uncertain prognosis. But after early hope and optimism, disappointment has inevitably followed.

It is now accepted that, while cortisone or ACTH have a dramatic effect in suppressing the symptoms and the inflammatory activity of the disease process, their effect is in no way curative. The use of these hormones is not replacement therapy, but involves the production of sufficient hyperadrenalism to suppress the body's reaction to the as yet unknown causative agent. All too often a satisfactory initial response to ACTH or cortisone will require progressively larger doses for its maintenance, with the associated dangers of more severe and prolonged hyperadrenalism. These dangers are apparently as great with hydrocortisone and even with the more recently developed steroids. With prednisone (Meticorten-Rx) and prednisolone, we must expect all of the untoward effects associated with the older steroids, with the exception of those due to salt and water retention and to potassium loss. The intra-articular injection of hydrocortisone acetate avoids the undesirable effects of systemic steroid administration, but is applicable to relatively few patients with persistent involvement of one or a few larger joints.

Phenylbutazone (Butazolodine-Rx) presents an even more difficult problem regarding its use. There is no doubt that many patients derive great relief from it, but it seems equally certain that its effects are primarily analgesic. It is clearly and consistently superior to salicylates only in rheumatoid spondylitis and in gout; in the latter condition its effect on acute attacks rivals that of colchicine. But the drug is potentially dangerous; and it has not yet been established that the feared complication of agranulocytosis can be avoided by limiting dosage and careful clinical and laboratory observations. Although gold salts have been used in this country for more than fifteen years, unquestioned evidence of their value in rheumatoid arthritis has not been forthcoming. The dangers of chrysotherapy are well known. While it has withstood the blizzard of clinical skepticism better than most, its reputation is somewhat tattered.

How then can we speak of "advances" when new drugs prove disappointing and limited in their application? The real advance is one in knowledge of the disease; we should have learned by now that it is most unlikely that rheumatoid arthritis will ever be "cured" by any one specific treatment. We should realize that the most important factors in handling the rheumatoid arthritic are the education of the patient in the problems to be faced, the use of analgesics and physical therapy to relieve pain and maintain joint function, and careful attention to any and all factors bearing on the general health of the individual patient. The advantages and limitations of the special treatment measures have been more accurately defined, so that their use in selected patients is of real value. But they very definitely represent additions to, rather than substitutes for, the established methods of proven value.

We now have considerable knowledge of the natural history of rheumatoid arthritis, and know that remissions and relapses must be expected. Ability to distinguish it from other forms of arthritis and non-articular rheumatism has improved, largely due to a better classification of the many diseases which fall under the heading of "rheumatism." Clinical laboratory and histologic evidence provide ample proof that rheumatoid arthritis is a systemic disease, and that the involvement of connective tissue is not restricted to the joint structures. Appreciation of the fact that it is the connective tissue which is primarily involved in many of the rheumatic diseases has led to intensive study

of the chemistry and physiology of both ground substance and collagen; it can be expected that such research will contribute to our knowledge of several of these poorly understood diseases.

The ancient and quixotic disease of gout has also yielded answers to some of its mysteries. Genetic studies have established the hereditary nature of the biochemical abnormality which underlies gout, and isotope tracer studies give promise of defining the metabolic abnormality which gives rise to the characteristic hyperuricemia. While colchicine remains the most reliable and practical drug for treatment of acute gout, the effectiveness of corticotropin, phenylbutazone, and newer colchicine derivatives provides welcome alternatives in the occasional resistant or sensitive patient. Probenecid (Penemid-Rx) has proved to be a safe and effective uricosuric agent; its use offers real hope for prevention of the late complications due to urate deposition in bones, soft tissue and kidneys.

Allergy

Recently there has been interest in the use of Metacortrandracine (Prednisone) and Metacortandralone (Prednisolone) in the symptomatic treatment of allergic disease. The purpose of this brief report is to summarize some of the metabolic studies and to give an impression of the use of these drugs in allergy.

Both Metacortrandracine and Metacortandralone will cause a reduction in the twenty-four-hour urinary 17-keto-steroid excretion. They will induce an eosinopenia. Water and sodium retention and potassium depletion have not occurred in patients studied by us when the daily dosage has been less than 30 mg. All asthmatic patients on long term therapy gained weight (3 to 36 pounds). The weight gain apparently is the result of general improvement of the patients and is not related to sodium and water retention. The vital capacity determinations of the asthmatic patients increased while maximum improvement usually occurred after three to seven days of therapy. An increase in the systolic blood pressure of 20 mm. of mercury occurred in one asthmatic patient and 30 mm. of mercury occurred in another.

In seventy-six asthmatic patients Metacortrandracine and/or Metacortandralone proved to be an effective therapeutic agent. In three patients the medication was ineffective and was discontinued because of undesirable side reactions. Maintenance dosage for therapeutic control usually varied from 5 to 15 mg. daily. One patient has required 25 mg. daily and two patients have needed 20 mg. per day. When these drugs are discontinued most of the patients have had a recurrence of their asthma.

Patients with perennial allergic rhinitis, seasonal hay fever and atopic eczema can be controlled symptomatically with these compounds. When the medication is stopped, most of these patients also had a recurrence of their symptoms.

Important side reactions such as moon facies, sleeplessness and varied gastro-intestinal disturbances are commonly seen with prolonged administration of Metacortrandracine and Metacortandralone. Substitution of these drugs in selected instances, however, may result in improvement of the Cushing's syndrome previously induced by other corticosteroids.

It should be emphasized that although Metacortrandracine and Metacortandralone appear to have certain advantages over the older corticosteroids, they do not replace older accepted procedures of elimination and hypersensitization. Prolonged administration of these compounds entails many of the same metabolic hazards as other adrenal corticosteroids.

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The Progress of Surgery

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Case Report

MRS. J. H., a forty-nine-year-old white woman from Galesburg, Michigan, was admitted to the hospital on January 15. Two years prior to admission a small lump appeared in her left breast which continued to grow quite rapidly. In the preceding three or four months it had become very hard and shortly began to suppurate. At the same time a dull, heavy pain began in the tumor which was slight and of no sharp variety. There had been no swelling in the arm pit. Her general health had been good in the past. Menses had been very irregular and when they did flow a great amount of blood was lost. Nothing of this kind had occurred in her family history.

Professor Maclean examined the patient and was of the impression that the tumor was decidedly malignant. She was informed of this, as well as of the possibility of recurrence after removal. Operation was advised, which the patient accepted.

Chloroform anesthesia was used and operation performed on January 15. An elliptical incision was made about the tumor, which was removed with no considerable hemorrhage. The lymphatics from the axilla were also removed. So much skin was removed that a large gap was left. This was closed under some tension and the patient caused to sit upright in bed (postoperatively). Antiseptic dressing was used in the operation.

The patient had considerable pain following recovery from anesthesia which was controlled by morphine. Her initial postoperative course was uncomplicated and wound healing was satisfactory. The tumor was examined by the pathologist, Professor Stowell, who pronounced it scirrhus growth.

During her convalescence it became apparent that the patient also had a cancer of the uterus which had "discharged" before the tumor was noticed in the breast. This information had been withheld by her at the time of her initial examination. She grew progressively weaker from the "effects of cancerous deposit in her system" and died on January 29, 1881. Autopsy was not performed.

Discussion

This case report is quoted from the records of the surgical clinics of the Department of Medicine and Surgery of the University of Michigan of 1880-1881. The medical school had been in existence for thirty-one years.[1] Dr. Donald Maclean was the third professor of surgery, having been preceded by Drs. Moses Gunn and Wm. Warren Greene. A wooden pavilion type hospital, built in 1877, provided adequate if not elaborate hospital facilities. There were no surgical residents as we know them today, although there was a house surgeon who cared for the patients in the absence of the professor. During the year, 255 patients visited the surgical clinic but only a minority of these were operated upon. The operations were carried out skillfully but knowledge of preoperative and postoperative care was practically nonexistent. There were separate departments of ophthalmology and of obstetrics and gynecology but Doctor Maclean cared for all the rest of the surgical patients. The medical students, one of whom was William J. Mayo, witnessed the infrequent operations and autopsies from the gallery of an amphitheatre.

Progress of Surgery Prior to 1881

Professor Maclean and other surgeons of 1881 stood upon the threshold of many exciting developments soon to come in surgery but by the same token had a rich heritage upon which to draw for guidance in their own problems. Although it is not our purpose to review all of surgical history, it is not remiss to pay brief tribute to some of those who bore and nurtured the spirit of scientific inquiry in surgery for us prior to that time. "In the field of observation, chance favors only the mind that is prepared." (Louis Pasteur)

Hippocrates, that versatile Greek of the fourth century B.C., was no stranger to the problems of the surgeon and well deserves the appellation of "The Father of Medicine."[2] He was among the first to recognize that disease is due to natural processes, and he performed cranial trephine, tracheal intubation and hemorrhoidectomy and managed fractures by reduction and traction. His major contribution to surgery lies in the fact that he divorced medicine from philosophy and brought about the union of medicine and surgery which, despite periods of separation and misunderstand-

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ing, persists in a state of more or less blissful harmony.

To Galen, a Greco-Roman of the 2nd century A.D., goes credit as the originator of research methods, the life-blood of every medical specialty. He was a prolific writer in the fields of philosophy, mathematics, grammar, and law, as well as in medicine. His excursions into anatomical dissection and into the physiology of the gastrointestinal tract, the circulation, and the nervous system, were objective to a surprising degree. Although many of his observations were later repudiated in the light of more accurate knowledge, with him surgery attained a height of respectability which it soon lost and could not regain for thirteen confused centuries.

During this ensuing period of almost absolute scientific sterility, the factual teachings of Galen survived, but his major contribution, the spirit of investigation, was all but lost. The inaccuracies of his hurried observations serve less to dim his stature than to condemn the lethargy of those who followed.

To Ambroise Paré (1510-1590) and Andreas Vesalius (1514-1563) we owe our thanks for picking surgery up by the boot straps and again placing it in a position favorable to its further progress. Paré, who arose from the rubble as a barber surgeon, exemplifies the wisdom and ingenuity in the contributions of the many excellent clinical surgeons who were to follow him. Vesalius brought about the happy reunion of the surgeon with the laboratory.[3] Recognizing serious discrepancies between his own observations and those of Galen, he returned to the dissecting room for clarification of his problem. Under his stimulus, an accurate knowledge of anatomical detail evolved which has served as the keystone of subsequent surgical progress.

Surgery has since developed slowly upon the ripples of an ever-widening circle of scientific knowledge. Progress has been sporadic and growth in any period dependent on the balance achieved between the spirit of investigation as exemplified by the laboratory and the clinical application of the new knowledge. One serves to stimulate the other and knowledge is where you find it—"chance favors the mind that is prepared."

William Beaumont, carrying his "laboratory" on his back at Fort Mackinac in 1822, found his stimulus in the traumatic gastric fistula of Alexis St. Martin, and became the first important surgical physiologist. How many surgeons before him had regarded the care of such a wound as only an odious duty?

Crawford Long, out of compassion for the miseries of the patients on whom he operated in a small Georgia town, first employed ether (1842) in the performance of a surgical operation. William Morton, with the facilities and obstacles of a great medical institution at his disposal, made the same contribution independently in 1846. The senseless argument as to which man should have the credit for the discovery of general anesthesia has fortunately long since been forgotten. To each we owe deep gratitude for opening new vistas in the surgical care of patients.

Many fundamental advances in surgery have come through the judicious utilization by the surgeon, in response to observed clinical need, of knowledge acquired by the painstaking efforts of scientists in other fields. This is nowhere better illustrated than in the evolution of asepsis. Joseph Lister, suspecting that suppuration is not inherent in wounds, in 1865 sought for environmental causes of this phenomenon. His search for knowledge led him to the work of Louis Pasteur, who eight years earlier had shown that fermentation was due to the action of minute organisms introduced into sugar media from the air. By applying this knowledge to his problem, Lister introduced antisepsis, which soon evolved into asepsis—and another giant stride in surgical progress had been made.

At the time of our case report in 1881, surgical thought throughout the world was influenced predominantly by Germany, and to a lesser extent by England. German scientists were attaining preeminence in all fields and carrying on enlightened investigation to a degree that has been surpassed only by the present activity in this country. Many fine hospitals and laboratories were built to which visitors flocked from all over the world. The impact of this vibrant force, which was to continue until its tragic and complete disintegration in the political upheaval of World War I, was felt in all fields of medicine. Many fundamental advances were made during this golden period, but the development of pathology, pioneered by Rudolph Virchow, had probably the greatest lasting effect upon surgeons. Imaginative German surgeons, led by Christian Billroth, were carried along on the

tide of this flood of collateral scientific development. Advances in surgical technique were initiated with a rapidity which has never been equalled, unless it be reached in the present phenomenal development of cardiovascular surgical techniques.

Evidences of many of these influences are apparent in Maclean's work. Anesthesia, ether as well as chloroform, was skillfully employed. "Listerism" or antisepsis had been readily accepted; it is probable that Maclean, who had studied under Syme, Lister's father-in-law at Edinburgh, was a willing convert to this innovation. Many of his contemporaries had refused to accept it as late as 1885. Silk sutures were frequently employed, and though this operation antedated Halsted's classic description of radical mastectomy by eight years, the importance of the removal of the axillary lymphatics during mastectomy for cancer of the breast was recognized. It is interesting to note that laparotomy for ovarian cyst, first performed without anesthesia by Ephraim McDowell in Kentucky in 1809, was performed by Maclean at this time, but that appendicitis, to be described by Reginald Fitz in 1886, went unrecognized. Apparently Maclean had little enthusiasm for inguinal hernia repair, as several needy patients were refused operation. This conservatism is understandable in that the historic independent descriptions of hernia repair by Halsted and by Bassini did not appear until 1889.

Progress in Surgery Since 1881

There have been many notable achievements in surgery during the past seventy-five years. It would be impossible for us to speak of all of these in their proper perspective, even though we were granted space to do so. The technical advances in all branches of surgery have been numerous and in many instances spectacular. We do not minimize their importance. Without the stimulus of the operating room, a surgeon worthy of the name is much like a captain without a ship; no matter how intriguing his dry land surroundings, he longs for the roll of the waves beneath him, and his potential for contribution is compromised.

Two events important to the development of surgery transpired before the turn of the century. The first of these, the opening of the Johns Hopkins Hospital in 1889, and of the Johns Hopkins Medical school four years later, had its influence primarily upon American surgery though its ultimate effects were world wide. There were a number of excellent medical schools in the United States at the time, and those in Philadelphia, Boston and New York had attained maturity. This was a bold new venture in medical education, however, which attracted a nucleus of highly selected professorial talent. Michigan itself contributed four of its graduates to the original faculty of eight. Two of these, Abel in pharmacology and Howell in physiology, were teaching in Ann Arbor at the time they were called to Johns Hopkins. William Halsted, who had been graduated from the New York College of Physicians and Surgeons in 1877 and had spent several years in post-graduate study midst the burgeoning German scientific spirit, was appointed professor of surgery. His ability was already evident in a number of important contributions made while practicing in New York. Quick to seize upon the opportunity provided by the new environment, Halsted established innovations in surgical technique, training, and investigation based upon his use of the nearly forgotten experimental method, innovations which continue to exert an important influence on surgeons even today.

The second development of major importance in this period was a product of the physics laboratory and of the genius of Conrad Roentgen—the discovery in 1895 of the roentgen ray. This great contribution opened up many remote areas of the body to precise and accurate preoperative diagnosis which had never before been possible, and added refinement of diagnosis to more superficial areas. To Walter Cannon, a medical student at Harvard at the time and later an outstanding physiologist who made a number of contributions which were important to surgery, goes a portion of the credit for his introduction of contrast media in the visualization of the gastrointestinal tract. With this, the final restraint to the rapid development of surgical operations in all but two regions of the body was lifted, and surgeons eagerly leaped to the challenge. When Walter Dandy introduced cerebral ventriculography in 1918, one of the two remaining frontiers was opened, and neurosurgeons energetically moved into the deep recesses of the brain. Now, thanks to the improved knowledge of cardio-respiratory physiology and of anesthesia, the last apparent frontier for technical surgery, the interior of the heart, is putting up its final resistance. Soon many an old Indian fighter will be talking of the past glories in the winning of the West!

Although overshadowed by the drama of technical advance, surgical progress has been moving quietly forward along other avenues. Despite considerable effort on the part of a few, attainments in these fields have been won only slowly. We speak of the growth of the spirit of investigation as typified by the surgical laboratory and of the post-graduate education of the surgeon. Both have had a tremendous influence on surgical progress during this century.

Influence of the "Surgical Laboratory."—A constantly increasing stream of fundamental and useful information is today coming from the surgical laboratories, particularly those devoted to study of the complex physiological disturbances associated with surgical diseases and trauma. The rapid advance to technical perfection left a big void in its wake. Thoughtful surgeons of the past generation, seeking to reduce the hazards of operation and to speed the recovery of their patients, looked to the basic medical sciences for solutions to vexing clinical problems. All too frequently the basic scientists were found wanting because of their unfamiliarity with the everyday problems of the surgeon, and because of their preoccupation with more theoretical projects. Ill patients could not very well be transported to the remote basic science laboratories with the hope of a hospitable reception. So gradually over the course of the years the laboratory has been moved to the patient, in spirit as well as in deed.

There are many fine surgical laboratories in the country today, each directed toward solution of problems of immediate concern to the individual surgeon or group. Consultation in research problems is as frequently requested and as graciously rendered by other fields here as it is in clinical practice. Whether the effort is directed toward solving the mysteries of the metabolic effects of trauma, or those of renal physiology or of the surgically-virgin cardiovascular system, is not of major consequence. Rivalry is keen and research activity is intensely and healthily competitive. As a new problem presents itself, guns are brought to bear from many different vantage points and firing persists until the problem is solved or found insoluble for the present. This activity is reflected in a perusal of the program for the Forty-first Annual Clinical Congress of the American College of Surgeons this year.[4] Some forty-two original reports of investigations into problems relating to the heart and great vessels were given at that meeting. Half that number were directed toward clarification of metabolic responses to various types of surgical disease or trauma. These contributions, as well as others in all facets of surgical interest, including radioisotope technniques, were made predominantly by surgeons, many in resident training but some even by medical students. The blind spots in our surgical vision are thus being slowly but relentlessly dispelled.

We do not disparage the many fine contributions of the professional nonsurgical scientist. Claude Bernard's basic concept (1878) of the dependence of the living organism on its internal liquid environment rather than on its external environment opened the door to all later knowledge of fluid and electrolyte balance. Physiologists, biochemists, pediatricians, endocrinologists and internists as well as surgeons have moved through the open door to make important contribution to our knowledge in this field. The tremendous and enduring contribution that surgeons have made in correlating and supplementing this kowledge so as to make it therapeutically beneficial to the surgical patient requires no amplification here.[5]

The surgeon-physiologist Alexis Carrel during a most productive period extending from 1902-1914 introduced many original techniques which have been basic to the development of cardiovascular surgery.[6] He perfected the technique of end-to-end suture of blood vessels and successfully carried out transplantation of preserved homologous blood vessels. Working with the French surgeon Tuffier, he successfully performed cardiac valvotomy in experimental animals. Carrel was fifty years ahead of his time in these observations, but it is interesting to speculate as to how much more rapidly the "sound barrier" in cardiovascular surgery might have been broken had he been endowed with the therapeutic viewpoint of the surgeon in addition to his many other talents. And the fact remains that the inquisitive surgeon is by and large left to his own devices for filling the gaps in knowledge or correcting fallacious concepts brought to light by his daily clinical problems. Though aided by contributions from many fields, new and old, the care of the sick is the responsibility of the physician, a responsibility that includes the constant translation of new and technical scientific jargon into useful and clinically applicable therapeutic measures.

Perhaps the most significant laboratory develop-

ment in recent years has been its movement into the field conditions of the war zones. The unfortunate catastrophic casualties of war have throughout history provided a rich source of clinical material for the study of the effects of trauma. Many clinical observations have been forthcoming from these experiences, but wars in the main have served only as proving grounds for developments previously recognized. One need only cite our experiences with antibiotics, tetanus toxoid, and stored whole blood during the second World War in support of this. Under the duress and uncertainties of actual combat, little opportunity has been provided in the past for the study of fundamental problems.

American surgeons in company with other scientists have always served willingly in the capacity in which they could be most helpful during the periods of national emergency. A voluntary organization, the National Academy of Sciences, made its appearance during the Civil War in response to the need of the Union government for co-ordinated scientific advice. This Academy was perpetuated and grew into the National Research Council in 1916, which organization has continued to the present time. Surgery has been well represented on this council, and surgeons have served faithfully and enthusiastically in evaluating the clinical problems of war and directing their solution.

Many surgical problems encountered during wartime in the past have been delegated to civilian laboratories, far removed from the war zone, for study. This policy has been fruitful and helpful. When the mortality rate from empyema reached the catastrophic level of 40 per cent during World War I, an Empyema Commission was appointed to investigate the problem. This commission, headed surgically by Dr. Evarts Graham, was assigned to work in the established laboratory at Johns Hopkins University. Following fundamental research there, recommendations were made which paid the immediate dividend of a tenfold drop in the mortality rate of empyema. The delayed dividends represented in this stimulus to the development of thoracic surgery are inestimable. The fact remained, however, that the potentialities for objective study of the physiologic effects of trauma and other surgical problems encountered among the wounded were dissipated by the inaccessibility of the laboratory to the surgical research mind at the geographic site of the problem.

There has been an increasing awareness among thoughtful surgeons of these lost opportunities; efforts to correct the situation are reflected, among others, in the studies of blood volume deficits of wounded soldiers in shock during World War I,[7] and those of Trueta[8] upon the vascular shunts of the kidney following trauma during World War II. With the advent of air transport, the hiatus between the wounded patient and the laboratory has been constantly narrowed. The observations of the Board for the Study of the Severely Wounded in forward areas during the Mediterranean Campaign,[9] combined with the observations and experiences of the British, were interesting and important. Their immediate effect was to emphasize the superiority of whole blood over that of pooled plasma in the resuscitation of the wounded. In conjunction with studies concomitantly carried on at home, the wisdom of volume-for-volume replacement of blood losses with whole blood was recognized. Reorganization of the mechanics of supply in quantity was rapidly effected with the saving of many lives. The delayed effect of this and similar studies was the development by the Armed Forces of an effective research organization with mobile laboratory facilities to bring the experimental method to the site of disaster.

This movement of the "laboratory" to war has reached its highest state of development with the U. S. Army's Surgical Research Team in Korea. Fundamental contributions to our knowledge of acute renal failure, hepatic and adrenal function, and gastrointestinal physiology, and to the management of burns, vascular injuries, and massive trauma have emanated from it.[10] More importantly, laboratory investigation at the battle front has proved feasible and useful. The prophecy and inspiration of Wm. Beaumont has reached fruition after 130 years!

Influence of Postgraduate Surgical Training.—Another great force in the progress of surgery in this century has been the increasing trend toward specialization. This move is not of course unique in medicine, but extends throughout other professional and vocational pursuits as well. Constant in-breeding within a limited field predisposes to a sterility of thought which is only prevented by a firm foundation of basic training and receptiveness to the views of others. Vigilance in this regard is

ever necessary. One cannot deny, however, that specialization has brought a higher quality of surgical care to patients in the population at large and has stimulated concentrated investigation in the special fields. Its general effect has been a highly beneficial one. Specialization has by the same token posed many problems for the surgical educator and has created complex sociologic and economic conflicts within the profession, solutions for which are not readily apparent at present.

This trend in medicine is far from new, as physicians have tended to develop more concentrated interests in restricted problems of patient care throughout all history. The Egyptian Iry was known in 2300 B.C. as the "royal ophthalmologist" in addition to being "magician, specialist in intestinal diseases, and shepherd of the rectum."[2] Gynecology also established its separate identity early, Straton of Lampsacos acquiring a reputation as a distinguished gynecologist in Greece in 280 B.C. The gynecologist J. Marion Sims, who announced the cure of vesico-vaginal fistula in 1852, is one of the important historical figures in early American surgery. The initiative of these two specialties is reflected in the existence at the University of Michigan in 1881 of academic chairs in ophthalmology, filled by Dr. George E. Frothingham, and in obstetrics and gynecology, occupied by Dr. Edward S. Dunster. The latter is credited[1] with planning the pavilion hospital erected in 1877, which was the first University Hospital.

Surgery reached a high degree of specialization in Germany during its virile period at the turn of this century. Many Americans migrated to its professional shrines for instruction. Wm. Halsted was one of those who caught the import of this scientific spark, whereas others merely warmed themselves sufficiently to become self-styled specialists. Many of these, through their own abilities, went on to pre-eminence in surgical specialties as did still others who did not have the advantage of even this minimum postgraduate training but advanced their knowledge through self-instruction and preceptor-training.

Halsted, no doubt motivated by the German influence as well as by his own great intellect,[11] recognized the need for graded supervision in surgical resident training. Under him at Johns Hopkins a sharply competitive program evolved which stimulated the development of similar programs in other centers and has served as the model for the pyramidal system of postgraduate surgical education. Halsted strived to train not surgeons alone but teachers of surgery who would be qualified to fill surgical posts in the rapidly developing educational centers of this country. In this, as in his other endeavors, he was pre-eminently successful.[12]

As the popularity of specialization increased it became apparent that standardization, or at least evaluation, of qualifications of the individual specialist was necessary to protect the patient from the unscrupulous few. In response to this the American Specialty Boards and the American College of Surgeons were organized in an effort to bring some order out of the developing chaos. Their origins were independent and the functions they carry out today are discrete.

The American College of Surgeons originated in 1913 as an association of surgeons in all the specialties. It defines not only minimum qualifications of surgical training but is an increasingly effective force in the continuing education of the surgeon. The formal training requirements for fellowship have become more severe through the years as surgical residencies have become more universally available and self-training or preceptor-training have become less desirable. This organization has done much to aid in the standardization of hospitals, to establish effective cancer control surveys, stimulate interest in the investigation of fundamental surgical problems, and to define ethical standards of conduct among its members.

The American Board of Ophthalmology, the first of the Boards, was established in 1917, followed by Otolaryngology (1924) and Obstetrics and Gynecology (1930). Since then, primary Boards, or affiliates of the American Board of Surgery (1937), have been established in all of the recognized surgical specialties. Although serving primarily to define the minimum standards of surgical training, they have provided a tremendous stimulus to postgraduate specialty training.

The influence of these two organizations, which are approaching unification of their minimum training requirements, was sharply manifested following World War II. Many young physicians, their formal training interrupted by long periods of duty in the armed forces, found that their abilities and opportunities were categorized in increasing frequency by civilian hospitals, as they had been in military assignments, on the basis of "Board Certification or its equivalent," and there-

fore sought further surgical education. Under the impact of the times the Halsted pyramidal system of surgical training became obsolete in the eyes of some of our surgical educators. In the interest of providing well-rounded training to more young surgeons, whose basic talents are not usually so clearly demarcated as the pyramidal system presupposes, and of providing better surgical care to an expanding population, these men have sponsored a more vertical ascension of graduated responsibility in surgical resident training. Both systems have their staunch supporters. It is interesting to speculate as to whether Halsted, confronted by conditions as they exist today, would have adhered so rigidly to the pyramidal plan wherein only the select few reach the pinnacle. At any rate, the demands for supervised training in surgery are being met and standards maintained. Competent surgeons of high ideals are becoming available to all geographical and economic strata in the United States, and wherever possible our scientific wealth is being shared with enquiring minds from other nations in partial repayment for our own priceless heritage.

Many specific advances in surgery have been made in recent years and we apologize for not summarizing them in writing to our subject. We can only recommend the excellent Collective Reviews of Fifty Years Progress in various facets of surgery which have appeared in the *International Abstracts of Surgery* of the publication *Surgery, Gynecology and Obstetrics* during the past year and the comprehensive summaries which appear periodically in the *New England Journal of Medicine* for detailed reviews of these specific advances.

Summary

Surgery is an art as well as a science. Technical advances may soon be superseded by different techniques. The interpretation of laboratory findings may be significantly altered in the face of further data. But the needs of the surgical patient go inexorably on. The real progress in surgery rests in our ability to satisfy these needs, to recognize and solve the surgical problems, whatever or wherever they may be, and to provide the enlightened man power to carry surgical knowledge ever forward. Past effort has crystallized in recent years with great success, but we hope for an even brighter future as the experimental method becomes universally employed to solve the present unknown.

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$10,000 A YEAR?

A special article in *U. S. News and World Report,* November 25, 1955, "Does It Pay To Be a Teacher?" makes the statement that 41 per cent of doctors of medicine, 28 per cent of lawyers, and only 5 per cent of educators are making $10,000 a year. In the next ten years we shall need 1,626,000 new teachers to replace the losses, and provide for the known increment of students. We are graduating 87,000 per year, but a great many of these never teach.

University professors averaged $7,000 a year in 1953. Salary changes to date show a loss of 2 per cent in purchasing power. The average for railroad engineers in 1953 was $7,352, and their present earnings' purchasing power has increased 57 per cent. High school principles had an average income in 1953 of $9,156, and their present increase has a purchasing power down 30 per cent, while railroad executives who then averaged $11,592 per year now have an increase of 11 per cent in relative purchasing ability.

Aldosterone in Clinical Medicine Past, Present and Future

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THE time has arrived for clinicians to become aware of the increasing importance in clinical medicine of aldosterone, the newly discovered adrenal cortical hormone. It has been demonstrated that increased adrenal production of aldosterone is involved in the pathogenesis of a number of very common clinical disorders. That many more diseases will be found to be associated with increased or decreased secretion of this hormone seems abundantly clear. This prediction is based not only upon the numerous possibilities which exist but also upon the fact that clinical investigators have merely scratched the surface of this fertile field since the hormone was proven to exist and shown to be measurable. A still existent deterrant to rapid progress consists of the very difficult and laborious biological and biochemical procedures which are involved in such studies. Nevertheless, a vista important to all physicians is gradually coming into view.

The purposes of this brief review are: (1) to provide that small measure of historical information which is essential for proper orientation to the clinical problems, (2) to delineate and classify the various clinical states in which abnormal production of aldosterone is now known to exist and to speculate upon the existence of others, and (3) to describe in detail primary aldosteronism,[1,2] the newly recognized clinical syndrome. Emphasis is given to this condition because it is a serious hypertensive-renal-vascular disease and represents the one condition to date of the entire "aldosterone group" which can be completely cured.

Discovery of Aldosterone

The history of aldosterone is still in the making. It goes back only to 1952 when Simpson, Tait and their co-workers[3-7] detected biologically and isolated chromatographically, from the "amorphous fraction"* of adrenal cortical extract, something which caused intense retention of sodium and diuresis of potassium in adrenalectomized rats. The potency of this material was so great that these investigators realized at once that they were not dealing with any of the known corticosteroids or with any combination of them. They[8] and Farrell and Richards[9] demonstrated the existence of this material in the adrenal venous blood of monkeys and dogs. This constituted good evidence that this substance was a normal secretory product of the adrenal gland. Because of its potent effect upon electrolyte metabolism (thirty times greater on sodium retention and five times greater on potassium diuresis than desoxycorticosterone) the material was tentatively given the name "electrocortin."

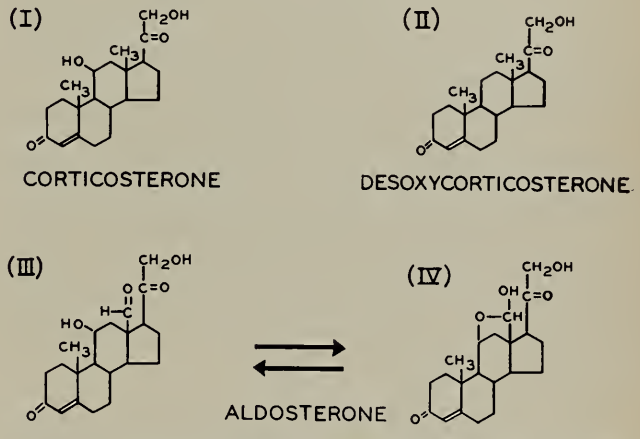


Fig. 1. Natural compounds exhibiting a preponderant activity upon electrolyte metabolism.

There then ensued in relatively rapid succession, isolation of the compound in pure crystalline form[10-12] identification of its chemical structure[13-15] and in July, 1955, actual synthesis of the compound.[16] Figure 1, III, indicates the chemical formula of aldosterone, the 18-aldehyde of corticosterone (Fig. 1, I). In solution a major portion of aldosterone exists as the hemiacetal (Fig. 1, IV). Desoxycorticosterone is shown, too (Fig. 1, II).

It is important to realize that much basic work

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*The non-crystalline residue which remains after the known crystalline steroids have been removed. This residue had been known for many years to have high biological activity when tested on adrenalectomized animals.

on the "amorphous fraction" of adrenal extract had already been done[17,20] and that the stage had been set for the brilliant discoveries of the 1952-1955 era.**

Clinical Background

From the clinical point of view, too, it had been suspected that the adrenal was capable of secreting a powerful electrolyte-regulating hormone, although it was assumed by many, without proper justification, that this steroid was probably desoxycorticosterone. The latter has been used to regulate electrolyte metabolism in patients with Addison's disease since Steiger and Reichstein[21] synthesized the compound in 1937. When cortisone and hydrocortisone became available for substitution therapy in Addison's disease it was quickly apparent that doses of these compounds adequate to normalize organic metabolism (protein, carbohydrate, et cetera) lacked the capacity to maintain normal metabolism of sodium and potassium. It was found necessary to give these patients desoxycorticosterone in addition to maintenance quantities of cortisone or hydrocortisone. Corticosterone (Fig. 1, I), however, was found to provide, in a single compound, good replacement therapy.[22]

In 1950 Deming and Leutscher[23] reported the presence of a sodium-retaining substance in urine of edematous nephrotics and cardiacs. Leutscher and his co-workers[24-30] have continued to work diligently on this important problem and have culminated their studies with the recent demonstration[31] that the urinary sodium-retaining substance is, indeed, aldosterone.

In a series of reports which began in 1944, my associates and I[32-38] demonstrated that the concentrations of sodium and chloride of thermal sweat could be used as an index of the activity of endogenously produced "desoxycorticosterone-like" or "salt-active" corticosteroids. Using this index we made the following observations:

1. Under conditions of sodium deprivation in man (prolonged sweating and low sodium diets) the adrenals are capable of maintaining an excessive output of desoxycorticosterone-like steroids for long periods of time (months); and that this activity is not accompanied by any evidence of increased production of other types of adrenal steroids.[35,37] These experiments were repeated recently,[38] this time with use of the newer urinary bioassay techniques. It was found that the "desoxycorticosterone-like" steroid produced in excess is aldosterone, indeed. Axelrad et al[39] have shown recently that severe restriction of dietary sodium leads to increased production of aldosterone, unaccompanied by evidence increased secretion of other adrenal cortical hormones.

2. Again, using the electrolyte composition of sweat as the index,[36] patients with panhypopituitarism were found to be producing almost normal quantities of the desoxycorticosterone-like steroids while patients with Addison's disease produced much less, if any. Leutscher[28] has shown recently that this relationship is true with respect to urinary aldosterone in these respective groups of patients.

3. Patients with Cushing's syndrome due to bilateral adrenal cortical hyperplasia showed only mild increases in production of desoxycorticosterone-like steroids while two patients with adrenal cortical cancer (one with Cushing's syndrome and one with adrenogenital syndrome) indicated the production of greatly excessive amounts of salt-active corticoids.[36] Venning et al[40] have reported recently that Cushing's syndrome associated with adrenal cancer gives large amounts of urinary aldosterone while that associated with hyperplasia shows no demonstrable increase.

4. Following surgical operations the sweat-electrolyte-index gave evidence of a greatly increased production of desoxycorticosterone-like steroids which continued for a considerable length of time in the postoperative period.[41] That aldosterone production is increased at this time has now been demonstrated by Llaurado[42,43] and by Venning et al.[40]

5. The following statement was made in 1949:[36] "It is predicted that some pathological conditions not yet linked to the adrenal cortex, as well as the physiological response to some forms of stress, will be found to be associated with a preponderant activity of the desoxy-like corticosteroids." These authors[37] singled out nephrosis, congestive heart failure, premenstrual edema and essential hypertension as diseases worthy of study in this regard, but stated[36] that "notable anasarca need not be an accompaniment of excessive production of desoxy-like corticosteroids." The recent discovery of the

**Many investigations which contributed directly or indirectly to this background have been omitted.

syndrome of primary aldosteronism[1] and the demonstration that an assortment of common clinical diseases exhibit excessive production of aldosterone have confirmed their suspicions.

Present Status

Table I presents a tentative etiological classification of hyper- and hypoaldosteronism. Included are the clinical conditions now known to be associated with abnormal production of aldosterone. In addition, it will be noted that names have been given to conditions which are not yet recognized as existing. We believe that many of them will be found to occur.

Hyperaldosteronism is divided into two main subgroups, primary aldosteronism and secondary aldosteronism. The former is meant to denote an abnormality of the adrenal cortex which, *per se,* gives rise to secretion of excessive amounts of aldosterone. Secondary aldosteronism indicates a situation in which excessive production of aldosterone is the result of an abnormality which has arisen outside of the adrenal gland. The adrenal then responds normally to an intense physiological stimulus or stimuli capable of evoking increased secretion of aldosterone. Secondary hormonal secretory activities of this nature are usually compensatory and are designed to overcome or buffer a biochemical abnormality which has arisen.

A similar division into subgroups has been assigned to hypoaldosteronism, primary aldosteronopenia indicating an abnormality of the adrenal itself, and secondary aldosteronopenia representing a compensatory reduction of aldosterone production based upon an extra-adrenal abnormality.

Secondary Aldosterone and Secondary Aldosteronopenia

The physiological mechanisms which increase and decrease adrenal secretion of aldosterone from the normal gland remain unknown at present. Thus, the precise stimuli, biochemical or physiological, which increase production of aldosterone in those diseases (nephrosis, congestive heart failure, hepatic cirrhosis, eclampsia idiopathic edema) associated with secondary aldosteronism are yet to be discovered. The answers are being sought diligently in many laboratories, for they will provide insight into the mechanisms of a large number of disturbances in electrolyte metabolism. The same statements apply to the projected group of disturbances which have been classified under the heading of secondary aldosteronopenia.

Since little is known, in a positive sense, of the mechanisms which control secretion of aldosterone from normal adrenal glands, there is at present no direct approach to the medical management of secondary aldosteronism. Obviously, bilateral ad-

TABLE I. ETIOLOGICAL CLASSIFICATION OF CONDITIONS ASSOCIATED WITH EXCESSIVE OR DIMINISHED PRODUCTION OF ALDOSTERONE.

- I. Hyperaldosteronism
 - A. *Primary aldosteronism*
 - 1. "Pure type" (normal production of hydrocortisone)
 - (a) Adrenal cortical adenoma[1,2,47]
 - (b) Bilateral adrenal cortical hyperplasia[54]
 - *(c) Adrenal cortical carcinoma (not yet reported)
 - 2. "Mixed types" excessive production of hydrocortisone, too)
 - (a) Adrenal cortical carcinoma[40]
 - (b) Adrenal metastases from bronchogenic carcinoma[64,65]
 - *(c) Others will be described
 - B. *Secondary aldosteronism*
 - 1. With edema (normal production of hydrocortisone)
 - (a) Nephrosis[31]
 - (b) Congestive cardiac failure[29]
 - (c) Cirrhosis of the liver[26,68]
 - (d) Eclampsia[45]
 - (e) Idiopathic edema[70]
 - *(f) Others will be described
 - 2. Without edema (normal production of hydrocortisone)
 - (a) "Salt-losing nephritis"[69]
 - (b) Dietary restriction of sodium[39]
 - (c) Intense sweating[38]
 - *(d) Others will be described
 - 3. Transient aldosteronism (increased production of hydrocortisone)
 - (a) Following surgical trauma[40-43]
 - *(b) Others will be described with other situations which induce "stress."
- II. Hypoaldosteronism
 - A. *Primary aldosteronopenia*
 - *1. "Pure type" (normal production of hydrocortisone)
 - (a) Not yet described
 - 2. "Mixed type" (diminished production of hydrocortisone, too)
 - (a) Addison's disease[28]
 - (1) Bilateral destructive lesions of adrenal cortices
 - (2) Idiopathic (primary) cortical atrophy
 - *(b) ? Congenital adrenal hyperplasia with excessive renal loss of sodium.
 - *B. *Secondary aldosteronopenia*
 - 1. Transient—Probably exists after removal of an aldosteronoma as well as under other circumstances.
 - 2. Chronic—not yet described. Must await clarification of the physiological mechanisms which stimulate and depress secretion of aldosterone.

*Indicates that author expects more information to develop at these points in the classification.

renalectomy would remove the source of aldosterone in cases of intractable edema associated with secondary aldosteronism. But there is no justification as yet for this procedure. If the secondary increase in aldosterone production proves to be compensatory, representing an attempt to normalize a presently undiscovered biochemical abnormality, the result may prove more deleterious than the persistence of edema. A rough analogy is seen in the diabetic under conditions of stress (surgery, injury, infections, et cetera). Stress produces in him, as in all people, secondary hydrocortisonism. The latter is necessary if he is to survive the stressful experience. The increase of hydrocortisone, however, may cause great insulin resistance and an intense exacerbation of his hyperglycemia and glycosuria. Adrenalectomy can ameliorate diabetes mellitus but the associated consequences must be weighed against the apparent benefit to the diabetic state.

Administration of ACTH or cortisone to edematous nephrotics is frequently successful in producing great diuresis and, in fact, is capable of reducing urinary excretion of aldosterone.[24] How this comes about is unknown but a possible mechanism has been suggested.[1] A point of considerable interest and importance is the fact that aldosterone secretion is not predominantly controlled by pituitary ACTH, as are the other major products of the adrenal cortex. Hypophysectomy in the dog results in but a moderate decrease in the level of aldosterone in adrenal venous blood.[44] The level of hydrocortisone, however, falls abruptly and to negligible amounts. Normal levels of urinary aldosterone are found in patients with hypopituitarism at a time when they exhibit greatly decreased amounts of urinary 17-hydroxycorticoids and 17-ketosteroids.[28] Conditions can be arranged, such as deprivation of sodium chloride and severe, prolonged sweating, in which one can demonstrate a tremendous increase of urinary aldosterone, unaccompanied by any other evidence of increased adrenal cortical activity.[38] Administration of ACTH to man results in only minor elevation of urinary aldosterone as compared with the major increase that occurs with respect to 17-hydroxycorticoid.[39,45] Thus, the adrenal gland has the capacity to increase its output of aldosterone selectively. The mechanism by which this is brought about does not involve stimulation of the gland by ACTH, at least, not by the compound that we now recognize as ACTH. However, any stimulus which enhances adrenal secretion of aldosterone would also have to be considered as an adrenocorticotropic factor. Whether or not this factor is hormonal in nature must await further work. Since hypophysectomy produces only a minor decrease in the secretion of aldosterone, a non-pituitary stimulator must be involved. Changes in extracellular fluid volume, changes in plasma and tissue electrolyte concentrations, and changes in renal dynamics are probably involved in the regulation of aldosterone secretion. Since nothing more is known, this is the point at which the clinical syndromes associated with secondary aldosteronism must be left at present.

Primary Aldosteronism

Primary aldosteronism is the one condition in the group of disturbances of aldosterone secretion which can be cured. The cause is an aldosterone-secreting adrenal cortical adenoma. Its clinical recognition is not difficult.

The syndrome was first described in October, 1954.[1,2] Since then a surprisingly large number of typical cases (at least 30) have been recognized clinically as being instances of primary aldosteronism,[46] and some of these patients are being readied for adrenal surgery. To date, we are aware of ten patients, including the original one,[2] who have had the typical clinical findings and in whom an adrenal cortical tumor has been demonstrated.[47-53] In six of the ten, determinations were made for urinary aldosterone.[47,48,51,53] All six showed very large amounts to be present. An eleventh patient is said to have shown bilateral cortical hyperplasia[54] and to have been cured by bilateral adrenalectomy. Three more cases have been recognized in retrospect, each patient having disclosed a single cortical adenoma at autopsy and each having suffered during life from primary aldosteronism.[55,57] The rapidity with which so many cases have been recognized following the original description of the syndrome suggests that this is not a rare disease.

The major clinical manifestations of this syndrome consist of periodic, severe muscular weakness, intermittent tetany and paraesthesia, polyuria and polydipsia, and hypertension. There is *no edema* nor any evidence of Cushing's syndrome.

The characteristic biochemical lesion in blood is comprised of hypokalemia, hypernatremia and alkalosis (elevation of pH and CO_2 combining power). Total serum calcium is normal. Hyposthenuria, unresponsive to pitressin, persistently

alkaline urine and mild proteinuria are observed. Bioassays for urinary aldosterone give extremely high values while urinary 17-hydroxycorticoids and 17-ketosteroids remain persistently normal.

Despite the periodic occurrence of severe muscular weakness, one is impressed with the relative lack of important symptoms at extremely low levels of serum potassium. Another striking manifestation of this syndrome is the great resistance which it offers against attempts at potassium repletion. With very large amounts of supplementary potassium, serum potassium rises, but only mildly. It seems certain that the condition which descriptively has been called "potassium-losing-nephritis"[58-62] is a manifestation of primary aldosteronism.

In the investigative laboratory the following findings, too, have been demonstrated:[1,2,47]

1. The concentrations of sodium and chloride of sweat and saliva are greatly depressed while that of potassium is abnormally high. This indicates intense biological activity of a sodium-retaining corticoid.

2. There exists negative balance for potassium in the presence of sodium equilibrium and of nitrogen equilibrium.

3. The biochemical lesion is confined to electrolyte metabolism, organic metabolism being normal.

4. Analyses of large muscle biopsies demonstrate a great excess of intracellular sodium and a great deficiency of intracellular potassium.

5. Bioassay for aldosterone on the cortical tumor tissue gave values (on a per gram basis) many times greater than that found in beef or hog adrenal; also thirty times greater than that found in an adrenal tumor that had produced Cushing's syndrome. Paper chromatographic study of extracts of the tumor reveals the active material to be aldosterone.

6. Biopsies of both kidneys reveal a diffuse vacuolar nephropathy, the so-called "clear-cell nephrosis" which is characteristic of chronic hypokalemia. This is the cause of the hyposthenuria.[63] Severe renal arteriolosclerosis is also found.

7. Disappearance of the entire clinical and biochemical abnormality (hypertension included) is complete within two weeks following removal of the cortical adenoma.

It is recommended that patients exhibiting the clinical and biochemical abnormalities described above be subjected to adrenal surgery. It is likely, from the information available to date, that the great majority of such patients harbor an *adrenal cortical tumor producing excessive amounts of aldosterone (aldosteronoma)*. However, there is reason to believe that in some patients with this syndrome a tumor will not be found at operation.[54,61] Under these circumstances a total adrenalectomy (or an extensive subtotal one, pending future experience) should be performed.

As indicated in the classification (Table I), an element of primary aldosteronism may exist in association with excessive production of other adrenal corticoids, particularly in malignancies involving the adrenal gland.[40,64,65] However, in such cases, the clinical picture produced by the other corticoids, as well as the presence of excessive amounts of other excretory steroids in the urine, focuses one's attention upon the adrenal as the source of the difficulty.

In "pure" primary aldosteronism such tell-tale signs pointing to adrenal involvement are absent since urinary 17-ketosteroids and 17-hydroxycorticoids are normal. The clinical picture and the biochemical lesion as described above, however, are characteristic and should now suggest to the physician that he is dealing with an abnormality of adrenal cortical function.

Primary Aldosteronopenia

A situation has not yet been described in which there is primary adrenal failure to produce sufficient aldosterone, in association with a maintained capacity to secrete normal quantities of the other corticoids. It is possible, however, that it exists. Since, on the basis of present knowledge, a diminished concentration of aldosterone in blood would not be expected to activate increased secretion of ACTH (as a diminished blood level of hydrocortisone is known to do) there would occur no increase in urinary steroidal excretion (17-hydroxy and 17-ketosteroids) to suggest an adrenal etiology for such a condition. Better quantitative methods for determination of aldosterone in blood will have to be devised before this postulated condition can be sought.

It is clear to those familiar with this field that an analogy has been drawn above with the condition now known as congenital adrenal hyperplasia (Table I). The latter condition is one in which a primary adrenal defect exists with respect to the steroidogenesis of hydrocortisone. According to the terminology used in our classification the name

"primary hydrocortisonopenia" would describe the situation better than the one now in use. In any case, the low level of blood hydrocortisone results in increased release of ACTH, which, in turn, produces bilateral cortical hyperplasia and greatly increased production of those steroids (mainly androgenic ones) in which no defect in steroidogenesis exists. Thus, the clinical result of "primary hydrocortisonopenia" is virilization, the so-called adrenogenital syndrome.

Many of these patients (primary hydrocortisonopenia) demonstrate a defect of electrolyte metabolism similar in all respects to that seen in Addison's disease. This is correctable as in the Addisonian by administration of desoxycorticosterone. This suggests that in addition to primary hydrocortisonopenia, a variable degree of primary aldosteronopenia may exist as well. Hypothetically, the pathway for steroidogenesis of aldosterone is similar to that of corticosterone.[66,67] It is possible, therefore, that the same enzymatic defect which interferes with normal synthesis of hydrocortisone results also in decreased production of aldosterone. But another possibility exists. Sodium loss in such patients could prove to be due to the presence of a substance which actively inhibits renal tubular reabsorption of sodium. Under such conditions production of aldosterone, if intact, would actually increase above normal. With respect to aldosterone, the condition would then have to be included as one of secondary aldosteronism. Leutscher[69] has, in fact, reported an abnormally high quantity of sodium-retaining steroid in the urine of a patient with the salt-losing type of congenital adrenal hyperplasia. In Table I, a (?) is placed before Congenital Adrenal Hyperplasia pending future clarification of these possibilities.

That primary aldosteronopenia exists in Addison's disease along with deficiency of all other adrenal secretory products goes without saying. It is placed in the classification for the sake of completeness. It is likely that with the recent synthesis of aldosterone[16] this compound will soon be available for use as physiological replacement therapy. It is effective when given orally. In proper combination with hydrocortisone it constitutes future natural replacement treatment of Addison's disease.

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Thyroid Gland

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THE primary intent of this review is to inform general practitioners of medicine about some newer developments in the diagnosis and treatment of thyroid disease which might be useful to them in their everyday practice. Since this task does not require a complete review of the more than 3,000 articles written yearly about the thyroid, and since it does require that new developments be presented with some background, no attempt has been made to review all good articles on thyroid disease, or to limit sharply the period of time from which the literature was selected for this review. Two of the most comprehensive review articles on the thyroid gland are by Riggs[1] and Albert.[2]

Gynecology and Obstetrics

Menstrual Irregularity.—Is there any rationale for the administration of desiccated thyroid to women with menstrual irregularities? Yes, there is good evidence that desiccated thyroid administration is beneficial for a certain type of menstrual irregularity associated with hypothyroidism. There is no proof, however, that desiccated thyroid will end menstrual irregularity in a women with a normal thyroid gland (euthyroid).

One of the most common types of menstrual irregularity is the condition *metropathia hemorrhagica.* The term is defined by Albright[3] as a clinical condition characterized by periods of amenorrhea interrupted by endometrial oozing or hemorrhage occurring without periodicity and with an absence of ovulation. This may be due to ovulatory failure with lack of normal progesterone secretion and increased estrin effect on the endometrium. Ordinarily, increased pituitary follicle-stimulating hormone, FSH, causes increased estrin effect and decreased leuteinizing hormone, LH, tends to result in ovulatory failure and lack of progesterone.

In humans, Goldsmith and coworkers[4] found that the characteristic feature in the menstrual response of humans to myxedema was ovulatory failure with a continuous estrin effect on the endometrium, leading to the syndrome of metropathia hemorrhagica. Their studies suggested that the locus of this defect in these women was in the LH-producing cells of the anterior pituitary, and that thyroid hormone was a necessary adjuvant in the proper functioning of these cells. They concluded that their studies might be interpreted to show that deficiency of thyroid hormone produces irregularities in menstrual flow through increase in FSH or decrease in LH (or both) output by the pituitary with secondary effects on the uterus via the ovaries.

Infertility, Abortion, and Toxemia.—(1) Hypothyroidism: There is no well-accepted experimental evidence that the administration of desiccated thyroid increases fertility or prevents toxemia of pregnancy. There is experimental evidence against this therapeutic possibility. Hodges, Hamilton, and Keettel[5] found reports of the occurrence of pregnancy in sixteen patients with authentic diagnosis of myxedema. They reported an additional case of an unequivocally myxedematous woman whose symptoms were established and had persisted for a fifteen-year period, during which time she bore six children, four of whom were living at the time of the report. The patient had never taken thyroid substance during this period of time. A careful study of the four living children revealed that they were euthyroid. The existence of numerous congenital and developmental defects in these children, however, suggested that the myxedematous maternal state exerted a deleterious effect on the children.

Peters et al[6] have presented experimental evidence in humans that the administration of desiccated thyroid to certain persistent aborters, regardless of their pre-pregnancy thyroid function, was followed by a normal outcome of a full-term pregnancy.

2. Hyperthyroidism: Astwood[7] made an excellent study of the opposite association—hyperthyroidism and pregnancy. This study supported the view that in hyperthyroidism there is an increased

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incidence of menstrual irregularity, diminished fertility, and a higher than normal rate of fetal loss through miscarriage and stillbirth. His data suggested that these difficulties were decreased in frequency and severity by treatment of the thyrotoxicosis. His findings indicated that if congenital anomalies occurred during pregnancy complicated by hyperthyroidism, these anomalies are not brought about by antithyroid drug treatment of the hyperthyroidism. Excessive dosage of antithyroid drug, however, with resultant hypothyroidism might increase the risk of abortion in early pregnancy and could, in late pregnancy, cause hypothyroidism and goiter in the fetus.

Goiter

Is iodine deficiency still thought to be the cause of non-toxic goiter, and is iodine administration the treatment of choice for such a goiter?

The answer to the first part of this question should be carefully worded to state that iodine deficiency is not the *sole* cause of such goiters but that most such goiters can be *prevented* by the administration of iodides. The answer to the second part of this question is that once a goiter has developed, desiccated thyroid administration, not iodine, is the treatment of choice.

Iodine Deficiency and the Etiology of Goiter.—Axelrad et al have recently summarized pertinent literature on iodine deficiency and goiter formation.[8] There is no question but what iodine deficiency is a cause of endemic goiter.

Other Factors.—Greenwald,[9] however, has presented good evidence that iodine deficiency is not the *sole* cause of either endemic goiter or experimentally produced goiter. He found that old methods for the chemical quantitative determinations of iodine in foods, water, and soil were not accurate. Furthermore, differences in iodine content were found to vary as much within a goiter area as the differences in iodine content found between a goiter area and a non-goiter area. In addition, Greenwald and others[10] have found that endemic goiter may appear in a geographical area, become widespread, and then markedly decrease in incidence and severity or disappear without any detectable quantitative change in iodine intake during this time.

Also, Greer[11] has isolated a naturally occurring goitrogen, 1-5-vinyl-2-thiooxozolidone in foods that inhibited thyroid function in man or rats fed diets which were not low in iodine. Similar goitrogenic compounds might be responsible for the production of goiters previously attributed to the lack of iodine.

Sex and constitutional predisposition may be additional factors in the etiology of simple goiter. Other factors, such as infection, later may be demonstrated to play a part in the genesis of goiter. In view of these diverse etiological possibilities, residents of Michigan may well rejoice in the findings of Brush and Altland,[12] which disclose that the incidence of goiter in Michigan school children has decreased from a level of 47 per cent in 1924 to 1.4 per cent in 1951 following the voluntary use of iodized salt in the state of Michigan. No evidence indicated that the use of iodized salt exerted a harmful effect. The incidence of toxic nodular goiters and non-nodular goiters seemed to decrease during this interval, presumably as a result of preventing the initial development of simple goiter.

Endemic Goiter, Thyrotoxicosis, and Cancer.—Clements[13] performed a careful statistical study on endemic goiter and its relationship to thyrotoxicosis and carcinoma of the thyroid in Australia. He presented data which tended to confirm the impression that the incidence of thyrotoxicosis is decreased by endemic goiter prevention. Data on carcinoma of the thyroid is less certain because carcinoma of the thyroid is diagnosed much less commonly during life.[14] Nevertheless, the data of both Clements[13] and Sokal[15] suggested that "the sequence of some, at least, of the cases of carcinoma of the thyroid has been: endemic goiter → thyrotoxicosis → cancer."[13]

Treatment of Simple Goiter; Iodine vs. Desiccated Thyroid.—Iodine administration not infrequently causes a reduction in goiter size in patients with well-established endemic goiter. Sporadic goiter is different from endemic goiter, however. Most patients with sporadic goiter, in the author's experience, have been using iodized salt at the time they developed their goiter. Iodine administration rarely causes dramatic shrinking of such a thyroid enlargement. Greer and Astwood[16] have reviewed the literature and repopularized the treatment of simple goiter with thyroid. They treated fifty cases of simple goiter over a five-year period with desiccated thyroid. They reported that 76 per cent of

the patients responded to therapy with a decrease in the size of the goiter and 40 per cent had a complete remission. Sixty-seven per cent of nine multinodular goiters had a favorable response, 33 per cent disappearing completely. Sixty-seven per cent of eighteen single nodules responded and 39 per cent disappeared completely. Only 15 per cent of forty goitrous patients not treated with thyroid had a reduction in the size of the goiter.

Desiccated Thyroid for Nodular Goiters.—Occasionally a patient in Michigan with a *simple* or *colloid* goiter of less than one year's duration will show regression of the goiter on desiccated thyroid treatment. On the other hand, there is also a current medical fad of treating patients with nodular goiter with desiccated thyroid in an effort to rid the patient of nodules or adenomas without resorting to the use of a surgical thyroidectomy. The regimen of diagnosis and treatment in such an instance is as follows: Solitary non-toxic thyroid nodules are classified as "hot" or "cold" depending upon whether or not their uptakes of I^{131} are more than that of a non-nodular area of thyroid tissue of the same patient.[17] To date, no one has reported the occurrence of a "hot" nodule which contained thyroid cancer. At least one-fourth of all "cold" nodules, however, have proved to harbor carcinoma.[17,18] It is hypothecated that the solitary nodule may disappear during the administration of desiccated thyroid for the same reasons that the simple goiter will respond to this form of therapy. That is, the goiter represents functional hypertrophy and hyperplasia in response to a demand to manufacture a normal amount of iodinated thyroid hormone with a deficient supply of one of the raw materials, iodine. Thyroid administration is supposed to inhibit the production of thyroid-stimulating hormone, TSH, by the pituitary, and thus cause involution of the goiter.

But the nodules so *rarely* disappear[17,18] under this form of therapy that thyroid therapy for nodular goiter would appear to have little practical utility. Another difficulty encountered in attempting to use this regimen for nodular goiter is that our patients have seldom returned to a physician for repalpation of the goiter at the end of a three-months' trial period.

Also, colloid adenomatous goiter with retrogressive changes is the most common type of goiter we see in the state of Michigan. It is highly unlikely that we can cause large areas of retrogessive change to disappear with the administration of desiccated thyroid. For these reasons it is improbable that the medical fad of desiccated thyroid administration for the treatment of nodular goiters will enjoy a long life. It may prove to be helpful in a relatively rare case of a small soft hot nodule in the thyroid of a reliable patient who will return for checkups and submit to surgical thyroidectomy if the nodule fails to disappear.

Surgery for Nodular Goiters.—(1) Age of Patient and Presence of Thyrotoxicosis: If a nodular goiter is toxic in a patient of any age, it should be removed after adequate preoperative preparation. If a nodular goiter is non-toxic, it is more liable to contain carcinoma than if it were toxic. If the person is under age twenty-five years, the liability of the nodular goiter to contain carcinoma is greatly increased. Ward[19] found a 40 per cent incidence of carcinoma of the thyroid in children less than fifteen years of age. Dailey and Lindsay[20] found that 59 per cent of the non-toxic nodular goiters in patients less than twenty years old were malignant. In adults, Cole and coworkers[21] found the incidence of carcinoma in toxic diffuse goiter was 0.1 per cent; in toxic nodular goiter, 1.0 per cent; and in non-toxic nodular goiter, 15.6 per cent. Twenty-one per cent of solitary non-toxic nodules and 9 per cent of multinodular non-toxic nodules were found to harbor carcinoma.

(2) Solitary Non-toxic Nodular Goiters: It seems clear from the relatively representative figures just cited that solitary non-toxic nodular goiters should be excised primarily as prophylaxis against carcinoma of the thyroid.

(3) Multinodular Non-toxic Goiters: Statistics suggest that the question here is not, should multinodular non-toxic goiters be excised? but *when* should they be excised? The lack of interest in removing multinodular non-toxic goiters is promoted mainly by the mistaken belief that the only motivation toward surgery here is concern over the relatively low incidence (8.7 per cent) of carcinomas in these goiters. Not so. The prophylaxis of carcinoma is but one problem in this situation. A dominant problem here is growth of goiter producing a poor cosmetic appearance, substernal extension, and deviation or compression of the trachea. Obstructive symptoms are frequently produced then at an age when these persons may well be developing heart disease. In addition, thyrotoxicosis usually appears after the goiter has been

present for an average period of 14.5 years.[22] In one series, thyrotoxicosis was present in 50 per cent of intrathoracic goiters at the time of operation.[23] Lastly, carcinoma does occur in such goiters. Unfortunately, the goiter may be observed for many years before signs of malignancy appear. In one series of patients with carcinoma of the thyroid,[24] 57 per cent of the patients with goiter were between the ages of fifty and eighty years and stated that they had had a goiter for fourteen to forty years before operation disclosed the presence of carcinoma. Because of all these considerations, it seems wise to remove such goiters surgically while the patient is still a good operative risk.

Surgery for Carcinoma.—Prophylactic approach for suspected carcinoma of the thyroid gland in solitary and multinodular goiters has already been outlined. Surgical approach for established carcinoma of the thyroid gland has gradually become more radical. The conservativeness of the old surgical approach to this problem was probably due to the relative benignity of thyroid carcinoma as compared to carcinoma of most other structures. An excellent study at Massachusetts General Hospital[25] disclosed the following survival rates of patients with three different morphologic types of thyroid carcinoma:

Cumulative survival to	5 years	10 years	20 years
Papillary	73%	60%	45%
Follicular	71%	48%	24%
Undifferentiated	17%	17%	17%

It should be noted that the survival rate of papillary carcinomas is excellent. Papillary carcinoma of the thyroid constitutes over 60 per cent of all thyroid carcinomas.[26] Consequently the average patient with carcinoma of the thyroid may have local excision of a single nodule as his only form of treatment and still remain asymptomatic for years. This excellent prognosis gave false confidence to the surgeon practicing conservative surgery for this type of carcinoma. It is now recognized that carcinoma of the thyroid tends to become more undifferentiated[25,27] and more invasive at age forty to fifty years and consequently should be treated more radically in the same manner as cancer occurring elsewhere. The newer, more radical approach, consequently, is roughly as follows.[25] The nodule in question is excised along with some "normal" surrounding thyroid tissue. Three or four lymph nodes from each jugular chain, normal or abnormal in appearance, are excised at the same time. All tissue removed is submitted for frozen section examination. If no carcinoma is found, nothing further is done. If carcinoma is found only in the thyroid, a bilateral total thyroidectomy is performed. If one or more lymph nodes from one side of the neck are also found to contain carcinoma, a radical neck dissection is performed on that side at the same operation. It should be stressed that a radical neck dissection should not be done if the patient has obvious metastases outside the neck region.

Thyroiditis

Differential Diagnosis.—Acute thyroiditis is often confused with carcinoma diagnostically. Hemmorrhage into an adenoma, or rapidly growing anaplastic carcinoma of the thyroid may produce sudden tender swelling in the thyroid gland simulating thyroiditis. As acute thyroiditis subsides, rock-hard nodules may develop transiently in the thyroid, simulating carcinoma of the thyroid. It is of interest therefore that two new diagnostic methods have been developed to aid in the diagnosis of thyroiditis. The first diagnostic method uses the I^{131} uptake and serum PBI determinations performed on the same day. The I^{131} uptake is usually depressed to less than 5 per cent at twenty-four hours (normal 15 to 45 per cent) while the serum protein- bound iodine is simultaneously elevated in acute thyroiditis.[28] The second diagnostic aid is a therapeutic trial of cortisone.[29,30] Cortisone administered to a patient with acute or subacute thyroiditis in dosage of 300 mg. per day for one day, then 200 mg. per day for two more days will usually result in dramatic or complete subsidence of all symptoms or signs of thyroiditis. If this result does not occur, thyroidectomy should be performed prophylactically for carcinoma.

Treatment of Thyroiditis.—It should be remembered that cortisone will not treat the underlying virus (?) infection but merely blocks the inflammatory response. The patient should therefore be given two weeks of strict bed rest in treatment of his disease and then be ambulated slowly. His dose of cortisone can be decreased to 100 mg. per day for the first week and then 12.5 mg. per day per week from then on. The relapse rate is high if the patient is not given bed rest or if the cortisone dosage is not tapered slowly.

Hypothyroidsim

Diagnosis.—The best generally available test to differentiate borderline hypothyroidism from normal thyroid activity is observation of the effect of a therapeutic trial of desiccated thyroid.[31,32] A basal metabolic rate, basal pulse rate, and serum cholesterol determination should be performed before and after a two-months' trial period of the administration of 1½ grains of desiccated thyroid per day. If the basal metabolic rate and basal pulse rate rise significantly and the serum cholesterol falls significantly, the patient has hypothyroidism. No significant change in these indices of thyroid function will be observed if the patient's thyroid gland is normal. Probably the next most helpful diagnostic test for detecting the presence of mild hypothyroidism is the serum protein-bound iodine.[33]

Primary Myxedema.—Myxedema due to primary "death" of the thyroid gland has been found to result in underactivity of the pituitary with respect to FSH[34] and TSH[35] and underactivity of the adrenal cortex.[34,36] Such a patient may well die from surgery because of inactivity of the pituitary-adrenal mechanism. Patients with myxedema treated with a small ration of desiccated thyroid may appear fairly well but may not attain complete recovery of pituitary and adrenocortical function until they have been maintained on 2 to 3 grains of desiccated thyroid per day for a relatively long period of time.[34]

Treatment of Myxedema.—Sodium-levo-thyroxin[37] and tri-iodo-thyronine[38] have appeared recently and have been advocated for the treatment of hypothyroidism. One tenth of a milligram of sodium-l-thyroxine has roughly the potency of one grain of thyroxine, as used in the treatment of myxedema. Thyroxine by mouth exerts the same rate, magnitude, and duration of calorigenic action as desiccated thyroid and possesses no significant advantage that justifies its adoption as the drug of choice in the routine treatment of hypothyroidism. Thyroxine is thought to be thyroid hormone as it circulates in the blood. It has been suggested that one of the four iodine atoms of thyroxine (in the 5′ position) is removed from thyroxine at the cell membrane and that the resultant compound, triiodothyronine, is the intracellular form of thyroid hormone.[39] The activity of l-triiodothyronine is four to five times as great as that of l-thyroxine in terms of weight, and six or more times in terms of iodine content.[40] A single large dose of thyroxine given to a patient with total myxedema results in a maximum rise in the basal metabolic rate to normal in four to seven days with a return to base line levels in eight to twelve weeks.[41,42] Triiodothyronine exerts its maximum effect in twenty-four to forty-eight hours, and the basal metabolic rate returns to base line values in five to seven days. It has been suggested, therefore, that triiodothyronine be used to treat patients with myxedema because it will make the patient well faster than desiccated thyroid or thyroxine. Actually, our greatest concern in treating the patient with myxedema is that we may raise the basal metabolic rate too rapidly and, by so doing, induce congestive heart failure, coronary insufficiency, or adrenocortical insufficiency. Consequently, the increased rate of calorigenic activity of triiodothyronine would tend to be a disadvantage in its usage rather than an asset. Furthermore, its more rapid decay in activity would cause uneven control of calorigenic effect. It may be concluded that there is no reason to change from the use of desiccated thyroid in the routine treatment of myxedema.

Hyperthyroidism

Diagnosis.—The radioiodine uptake test is generally thought[43] to be the most helpful single test in the diagnosis of borderline thyrotoxicosis. The serum PBI is of more value in the diagnosis of hypothyroidism than in the diagnosis of hyperthyroidism. This latter determination measures such minute amounts of iodine that results are frequently altered by iodine in chemical reagents. For this and other reasons it is poorly adaptable to the average general clinical laboratory. The administration of iodides in the form of x-ray contrast media, cough medicines, and vitamin capsules constitutes the major cause of "false" abnormalities in these tests.[44]

Treatment with Radioactive Iodine.—The main change that has been observed in the treatment of hyperthyroidism is an increased use of radioactive iodine.

(1) Contraindications: It is generally accepted, however, that until we have had a twenty-year follow-up on patients treated for hyperthyroidism with radioactive iodine, we will not be able to settle conclusively the question of whether or not radioiodine is carcinogenic as used in the treat-

ment of this disease. At present, although no patients have developed carcinoma thought to be related to the I^{131} therapy, there is enough disturbing evidence[45,46] regarding the possible carcinogenic effects of I^{131} to warant limitation of the use of I^{131} as the treatment of choice for non-nodular toxic goiter to persons over the age of forty years. If the goiter is large or nodular, it may already harbor carcinoma and should be removed surgically. Radioiodine is also contraindicated in the treatment of toxic goiter in a pregnant woman.

(2) Indications: These contraindications leave the following indications for radioiodine therapy for thyrotoxicosis: (a) Persistent or recurrent thyrotoxicosis after subtotal thyroidectomy for nonnodular toxic goiter. Here the anatomical landmarks have been sufficiently disturbed to produce a very real and well-established increased operative morbidity as compared to the possible but undemonstrated carcinogenic effects of I^{131}. (b) Refusal of surgery by the surgeon or patient. (c) Disabling pre-operative preparation or reaction to antithyroid medication before the patient is adequately prepared for operation. (d) Eye signs of serious exophthalmos.

Radioiodine users face the same dilemma as surgeons in that the destruction or removal of too much thyroid tissue results in the development of hypothyroidism. If the initial dose purposely is kept small to avoid the development of hypothyroidism, the incidence of persistent or recurrent hyperthyroidism is increased. When we treated a large series of patients[47] in an attempt to make them well with *one dose* of I^{131}, there was a 20 per cent incidence of temporary or permanent hypothyroidism and a 20 per cent incidence of persistent or recurrent hyperthyroidism that required the administration of one or more additional doses of $I.^{131}$ Various attempts are underway at present to reduce the incidence of hypothyroidism by giving smaller doses of I^{131} at more frequent intervals[48] using "prediction" tests to shorten the necessary time for observation after the first dose.

Antithyroid Drugs.—Antithyroid drugs are used much less commonly since the Atomic Energy Commission released radioactive iodine for use in private practice. Propylthiouracil in dosage of 300 milligrams per day or Tapazole (1-methyl-2-mercaptoimidazole) in dosage of 20 to 40 milligrams per day enjoy the most widespread popularity. Only rarely are they used today as the sole mode of treatment for a patient with thyrotoxicants. Such a patient is usually a young person with no goiter, strong evidence of thyrotoxicosis, but with a heavy emotional overlay. Antithyroid drugs are still used most commonly, however, in preoperative preparation. The patient with thyrotoxicosis is given 100 milligrams of propylthiouracil three times daily and 1 to 5 drops of Lugol's solution of iodine daily until he is clinically euthyroid. Thyroidectomy is then performed without first stopping propylthiouracil and giving iodine alone before operation, since Danowski has shown that iodine plus antithyroid drug make the patient well faster than either alone,[49] and Rawson has shown[50] that excellent involution of the hyperplastic thyroid occurs when iodine is administered concomitantly with antithyroid drug.

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BRYN MAWR HOSPITAL'S ANNUAL REPORT

Bryn Mawr Hospital's annual report lists a total of nearly 13,000 in-patients served in the last fiscal year. The institution is described in the report as "a small town with over 1,000 people within its walls each day and $12,000,000 worth of buildings, grounds and other assets." The mortgage burden of $756,000 is being paid off at the rate of $71,250 a year. Operating expenses have increased $135,000 over the previous year, largely due to further increases in salaries and wages which account for over 68 per cent of the operating cost. The hospital supplied $330,754 worth of free service to ward and out-patients. Total income for the year was $2,600,000, total expenditures were $2,684,000, resulting in a loss of $84,000.

During the fiscal year there were 12,802 in-patient admissions, with each patient staying an average of nearly nine days. The normal day saw 314 patients staying in the hospital, 12,139 were treated in the accident ward and there were 11,472 visits to the dispensary.—*Philadelphia Medicine,* Dec. 16, 1955.

High Energy Radiation in the Treatment of Cancer

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AT THE present time in the field of radiation therapy we are witnessing the remarkable phenomenon of a tremendous expansion of the number of installations of high energy radiation devices to be employed in the treatment of malignant disease. These devices include one and two million volt x-ray machines, betatrons, linear accelerators and cobalt-60 teletherapy units. It is largely the last named, the cobalt-60 devices, that accounts for the current expansion. The clinical application of high energy radiation in this country is not new. At the California Institute of Technology in Pasadena, a clinical trial of one million volt x-ray radiation was begun in the latter part of 1930 and reported in 1937 at the Fifth International Congress of Radiology.[1] A one million volt x-ray machine was installed and used in 1932 at the Tumor Institute of The Swedish General Hospital in Seattle;[2] this apparatus was in active clinical use until a few years ago. These were not the only installations of this type. Now some two decades later with the availability of cobalt-60 sources and the development of cobalt-60 devices, high energy radiation therapy installations are becoming widespread throughout the nation.

It cannot be maintained that the experience of the past twenty years with the isolated high energy radiation installations has clearly demonstrated great clinical value in the treatment of malignant disease and obvious superiority over results obtained by careful meticulous radiotherapy carried out with radiation in the 200 to 400 kilovolt range. Thus the basis for the current great expansion in this type of facility must be sought first in the promise of the possibility of obtaining improved results, the ready availability of radioactive cobalt brought about by the construction and use of uraniam reactors and certain other factors which are not immediately medical in character. A conservative and sound judgment of the potentialities of high energy radiation in clinical therapy is to be found in the articles by Cantril and Buschke[2,3,4,16] who have reported what is probably the longest continuous experience in this field.

High energy radiation may be defined as x-rays generated by one or more million volts (m.e.v.) in contrast to high-voltage x-ray radiation produced in the voltage range of 200,000 to 400,000. At the present time, the standard of high voltage x-rays for therapeutic use tends to be those produced by a varying voltage of 220,000 or a constant voltage of 250,000. In the high energy range, the tendency in x-ray machines is towards two million volt apparatus of which two types are available commercially today: one, a low frequency resonant transformer type, produced by the General Electric Co. and the other a Van der Graf apparatus (essentially a large electrostatic machine) manufactured by the High Voltage Corporation.

Of the cobalt-60 devices a variety are available on the current market ranging from units working at short distances with sources of several hundred curies to the larger teletherapy devices which may contain up to 2000 curies of cobalt-60 and may be used with treatment distances of 70 to 100 cm., essentially the distances used with 1 to 2 m.e.v. x-ray machines. Some of the devices are so constructed that it is possible to move the source around the stationary patient whereas with others the source is fixed as in the conventional x-ray therapy machine; with the latter type so called "rotational" therapy must be done by rotating the patient, usually in the erect position.

Certain differences exist between 1 to 2 m.e.v. x-ray machines (often termed "supervoltage" machines) and cobalt-60 therapy devices for teletherapy (i.e. therapy at a distance). The cobalt units are more compact and may be housed in rooms of ordinary size in contrast to the larger chambers required by the large x-ray machines. No energizing equipment for production of high voltage is required by cobalt units—the radiation being given off by the radioactive cobalt source.

From the Alice Crocker Lloyd Radiation Therapy Center, University of Michigan, Ann Arbor, Michigan.

In the case of the x-ray machine a switch shuts off x-ray production but radiation never ceases to come from a cobalt source; elaborate precautions are required for opening and closing a foolproof shutter to permit a radiation beam to be turned on and off the patient. The elaborate electrical equipment associated with a supervoltage x-ray machine implies the necessity of periodic servicing and parts replacement while the simple arrangements of a cobalt unit minimizes such necessity. On the other hand, the cobalt source deteriorates continuously in radioactive strength so that in 5.3 years its radiation output will decrease by 50 per cent. Cobalt-60 replacement is expensive; estimates of the cost of maintenance and operation of 2 m.e.v. x-ray machines and the larger cobalt units have been about equal. With both, a considerable investment in construction costs is required for protection of the region in the vicinity of the treatment room from direct and scattered high energy radiation.

The composition of the radiation beam emitted by a cobalt source is quite different from that produced by a 2 m.e.v. x-ray machine. The latter consists of a continuous spectrum of wave lengths but the cobalt radiation beam is made up only of two wave lengths corresponding to 1.1 and 1.3 m.e.v. For practical purposes the radiation from a cobalt source is monochromatic. It is not known that this offers any advantage for clinical radiation therapy. In general the radiation output as measured in roentgens per minute is higher with a 2 m.e.v. x-ray machine than with even the larger cobalt teletherapy machines (up to 2000 curie sources) and of course the higher output is maintained over time in contrast to the decreasing output of the radioactive source. This offers certain practical advantages but the output of the larger teletherapy cobalt units is entirely adequate.

Inherent in all the cobalt devices is the physical disadvantage of a larger size of the radiation source in comparison with the smaller size of the focal spot(the site of generation of x-rays) in a 2 m.e.v. x-ray machine. In the commercially available cobalt-60 devices, the smallest diameter of the source that can be obtained is 2 cm. Because of this, geometric considerations make it impossible to collimate the radiation beam as well as with a 2 m.e.v. machine; a certain dimension of penumbra at the beam edges greater than that occurring with 2 m.e.v. machines is inevitable.

X-RAY WITH CO-60

Depth (cm.)	220 Kv[1]	Co-60[2]	Ratio Co-60/220 Kv.
0	100		
0.6		100	
2.0	92	93	1.01
5.0	68	78	1.15
7.0	54	68	1.26
10.0	37	56	1.51
15.0	18	38	2.11
18.0	12	30	2.50

[1]220 Kv., H.V.L. 1.5 mm. Cu. distance 70 cm., field dimension of 10 cm.

[2]Co-60 Theratron Teletherapy Unit, variable shutter with 10 cm. extension tube, distance 73.3 cm., field dimension of 10 cm.

However this can be minimized sufficiently to make it unimportant in clinical radiotherapy.

One of the great physical advantages of high energy radiation over radiation produced in the voltage range of 200 to 400 kilovolts is the increased dose obtained in the depth of the body with equal surface doses. Dixon et al[5] have compared depth dose curves of a conventional type cobalt-60 teletherapy unit with 2, 3 and 4 m.e.v. x-ray machines for 10 by 10 cm. fields at a distance of 70 cm. and have shown that the depth dose obtainable with cobalt-60 is about the same as that of an x-ray beam of 3 m.e.v. The advantage in this respect of cobalt-60 is due essentially to the monochromatic character of the cobalt beam as opposed to heterogenous wave length composition of the 2 m.e.v. x-ray beam.

In Table I is presented a tabulation of relative radiation dose at various levels below the surface for 220 Kv. and cobalt-60 radiation. These data were taken from isodose curves obtained on our own machines with an automatic isodose plotter developed and constructed by our radiation physicist, Dr. Charles Simons. The increasing advantage with increasing depth of the cobalt radiation over high voltage x-ray is obvious. At 10 cm. below the surface the cobalt dose is 1.5 times that of the x-ray dose; at 18 cm. it is 2:5 times as large. This means that even with relatively small fields, as those employed in this example, large doses may readily be introduced into the depths of the body. This ability to use smaller fields carries an important clinical advantage: the smaller the irradiated volume the better is the radiation treatment tolerated by the patient.

Table I demonstrates an additional physical advantage. It will be noted that the maximum dose for 220 Kv. x-ray occurs at the surface (that is, in the skin). The maximum dose for the cobalt beam, however, is not found at the surface but at

about 6 mm. below the surface, that is, below the skin. In contrast to the low-energy electrons produced by x-ray, those produced by the high energy radiation have such long ranges in tissue that equilibrium (that is, as many new electrons being produced as have totally dissipated their energy by ion production) is not achieved until about 6 mm. of tissue have been traversed by the radiation beam. Thus the high energy radiation produces a low dose in skin on the surface minimizing or eliminating radiation skin reaction. It is possible to give a skin dose of 7000 r of 220 Kv. radiation in about four and one-half weeks; this produces complete desquamation of the epidermis which will be replaced in several weeks. With cobalt-60 radiation a dose of 7000 r at 6 mm. below the surface in the same time will produce almost no skin reaction and deliver a greater dose in the depth. This is an obvious clinical advantage but an advantage which is related to convenience and patient comfort and not to any increased ability to cure malignant disease. Indeed from another viewpoint the diminished intensity of skin reaction forms the basis of a clinical disadvantage. Skin reaction has constituted a rough basis for dosimetry and has acted as a factor or warning against, and limiting the danger, of overdosage in the depth of the body. With this absent. control of internal dosage must be based on careful control by accurate physical methods of dosimetry and clinical evidence of radiation reaction in internal structures.

A third physical attribute of high energy radiation which can be applied with advantage to clinical radiotherapy is based on the fact that this radiation in passing through matter tends to scatter in a forward direction rather than to the side or backwards. Therefore at any given level below the surface the radiation dose tends to be more uniform across the width of the beam than in the case of lower voltage radiation; with the latter the fall off in radiation quantity towards the edges of the beam may be considerable. Thus it is possible to provide more uniform dose in a lesion with high energy radiation and to diminish the quantity of radiation outside of the geometric limits of the beam. It may at times become possible to administer a relatively uniform dose in a tumor through a single field (simplifying the technique of treatment) with a small field which limits the volume of tissue irradiated (less "radiation sickness") and less radiation dose (thus further enhancing systemic and also local tolerance) outside of the volume brought up to a high dose.

Another physical attribute of high energy radiation in its reaction with the tissues of the body is the decreased absorption of energy in bone per roentgen of ionization in soft tissue for this type of radiation as compared to ordinary high voltage x-ray. The energy absorption in bone for 200 Kv. x-ray is about 2.5 times that in soft tissue[6] whereas for high energy radiation (1 or more m.e.v.) the energy absorption in bone is about the same as that in soft tissue.[7] In a qualitative manner this is demonstrated when radiographs are made with high energy radiation. Contrary to relatively satisfactory recording of bone structures when 200 Kv. radiation is used, with cobalt-60 radiation, virtually no difference between soft tissues and bone structures can be found in the radiograph. Another investigation[6] of the interaction of high energy radiation and bone as compared to 200-250 Kv. x-rays has shown that the soft tissues within the haversian canals receive a dose only slightly larger than soft tissues remote from bone when high energy radiation is administered but with the lower voltage radiation this dose is considerably greater. Experience suggests that radiation damage of bone proceeds by way of radiation effect on its soft tissue elements, especially on the capillaries within the haversian canals. It is hoped that the relative sparing of these soft tissue elements by high energy radiation may become evident clinically in the reduction of the incidence of radiation bone complications.

The decreased energy absorption in bone for high energy radiation is a significant and important phenomenon for clinical radiotherapy. This means that for clinical radiation dosimetry the presence of bone may be disregarded and dose distributions measured by a physicist in a soft tissue equivalent phantom may be applied directly to the human body. It has been the practice to do the same for lower voltage radiation but actually the formal tables of depth dose are not directly applicable and the error involved may be considerable. Much of current radiation dosimetry must be considered inaccurate while the potentiality of obtaining accurate dosimetry with high energy radiation such as cobalt-60 is excellent and a much firmer physical basis for clinical radiotherapy may be established. Obviously this means that an adequate physics laboratory must be a part of the radiotherapeutic set-up and directed by

a radiation physicist who works intimately with the radiotherapist.

The basis for hope of improving the results of clinical radiotherapy of malignant neoplasms by the use of high energy radiation rests on physical attributes which provide (1) increased depth dose, (2) "skin sparing" action, (3) decreased lateral scattering, and (4) decreased energy absorption in bone and its soft tissue elements.

Currently in radiation therapy there is much interest in a technical method of irradiation termed "rotational" therapy. For many years radiation dose in a tumor has been augmented by the technical expedient of directing radiation beams through a number of fields on the various surfaces of the body so that they cross in and about the region of the tumor. In the volume so "cross-fired" the tumor dose becomes the sum of the increments contributed by each beam. This is a most useful technical approach enabling one to produce a zone of relatively high dose in the tumor area and relatively low dose elsewhere. A logical extension is the use of an infinite number of "cross-firing" beams and this may be achieved by rotating the patient relative to a fixed x-ray tube. In the field of high energy radiation treatment two points merit mention regarding rotational therapy. With lower voltage radiation the purpose of rotational techniques is to increase the dose in the tumor to an adequate level (this dose has been termed "tumorocidal" dose but this is erroneous; analysis can demonstrate that in most instances this is simply the maximum dose that can be tolerated by the patient systemically or more often locally in and about the tumor volume). With high energy radiation, it is entirely possible to introduce the requisite high dose in the tumor region often with only one field. The purpose of a rotational technique with this radiation is to reduce the dose outside of the tumor area. For example a carcinoma of the thoracic part of the esophagus may be adequately irradiated with only one anterior and one posterior field using cobalt-60 radiation but the entire block of tissue between the opposing fields will have about the same dose as the esophagus. Employing a rotational technique, the same dose may be maintained in the region of the lesion but the dose outside of this region is much reduced. The second point of interest is that with the introduction of isotope sources for teletherapy the bulk of the radiation source housing has been so greatly reduced compared to that of a 2 m.e.v. x-ray machine that it has been possible to construct apparatus which moves the source around the stationary patient. Thus with the Theratron (a rotational type of cobalt-60 teletherapy unit) the patient lies in the horizontal position and the source rotates around the patient. This offers many practical advantages for clinical therapy in both rotational and convention techniques.

From a radiobiological point of view, does evidence exist which points to advantages of high energy radiation other than those derived from the physical attributes already described? Is this high energy radiation more effective in destroying tumor tissue as opposed to normal tissues? Does high energy radiation make more types of tumors responsive to radiation than is the case with lower voltage radiation? Unfortunately the answer to each of these questions is the same and in the negative. There is no evidence which indicates advantages other than those which derive from certain physical attributes already presented. Other than the "skin sparing" action, there is no evidence of an increased selective or differential effect. As far as is known today, the use of high energy radiation in no way alters the fundamental radiobiology of malignant neoplasms. Those tumors which are radioresponsive when lower voltage radiation is used are responsive to high energy radiation; those which do not respond favorably to 200-400 Kv. radiation do not respond favorably to high energy radiation. High energy radiation therapy appears to be governed by the same principles as all previous radiotherapy.

Actually there is evidence to show that high energy radiation is biologically less effective per unit dose than the lower energy radiations. Investigations comparing the biological effectiveness of high energy radiation and 200 Kv. x-rays on small biological test objects have shown that 1.3 to 1.5 times as large a dose of the high energy radiation is required as of the lower energy to produce the same effect.[8,9,10] This is part of a general principle evolved by Zirkle[11] that biological effectiveness is related to the density of ion formation along the ionizing particle tracks; the density in the case of high energy radiation is less than that for 200 Kv. x-rays. This, however, has no influence on the selective action of a radiation on tumor versus normal tissue. If observable in clinical radiotherapy it would simply mean that a somewhat higher dose level was required with

high energy radiation. The clinical reports available in the literature on 1 m.e.v. radiation do not suggest that this is the case to any significant degree.

It is perhaps unfortunate that, in the optimism expressed by the lay press and quite apparently shared by many physicians, one aspect of high energy radiation treatment has been virtually overlooked. The very same physical attributes that provide the basis for possible improvement in clinical results make this a form of radiation capable of causing severe radiation accidents and damage to deeply situated organs and tissues. The potentiality for the creation of such untoward complications is much greater with this form of radiation. The greater depth dose and the "skin sparing" action can be a deadly combination: there is no skin reaction to function as a warning and the tolerance of mucous membranes and the vasculo-connective tissues of deeper structures may be surpassed with critical sequelae. The decreased lateral scattering, encouraging the use of small sized fields, may lead only to missing the tumor area if the latter is not properly localized and the radiation beam directed properly. Despite the limited published experience on clinical radiotherapy with high energy radiation, the literature contains ample corroboration of the potentiality for harm of this radiation. Reports of severe damage, sometimes with lethal outcome, of many internal structures (stomach, bowel, other soft tissues and bone) exist.[2,12-15]

High energy radiation certainly has the potentiality for raising to some degree the cure rates in certain deeply situated tumors. Indeed results reported on carcinoma of the esophagus suggest this.[16] However, this can be accomplished only by careful and meticulous exploitation of the physical attributes previously described with due attention to known principles of tumor and normal tissue radiobiology. High energy radiation does not displace lower voltage radiation from the armamentarium of the radiotherapist but serves rather to augment it. There are few workers who have had adequate experience with this entity; many problems of its clinical application remain to be solved; many technics have to be evolved. Unless careful clinical, radiobiological and physical control is exercised in these early years of expanded clinical use, the eventual losses may exceed the gains.

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Most giant cell tumors may be adequately and safely treated by surgery followed, in some instances, by irradiation therapy.

* * *

At present, it appears that the prognosis in cases of reticulum cell sarcoma of bone is significantly better than in most other primary malignant tumors of bone.

* * *

The greatest hope for a really satisfactory cure rate for cancer of the stomach would seem to be an adequate screening test for cancer. Earlier diagnosis by an increase in the index of suspicion by physicians and patients is the only apparent means at present available.

* * *

Since it has been known for two decades that only early cancer is curable, and that two-thirds of all cancers in the human body can be diagnosed by a medical examination in the physician's office, why do some physicians still hesitate to make such examinations or to rule out cancer in every examination made?

* * *

No physician is justified in assuming full responsibility for every case of cancer encountered in his practice.

Slipped Upper Femoral Epiphysis

Early Recognition and Treatment

By S. J. O'Connor,M.D., and
J. C. Ivanoff, M.D.
Ann Arbor, Michigan

ACUTE slipping of the upper (or capital) femoral epiphysis is a challenging and disfactor is almost certainly trauma, be it repeatedly abling affection of youth, one in which early recognition and appropriate treatment are of prime importance in preventing the crippling effects of the displacement.

Slipping of the upper femoral epiphysis is now recognized as a surgical emergency. The phenomenon has been variously termed epiphyseolysis, epiphyseal or adolescent coxa vara, and epiphyseal coxa anteverta. It displays the pathologic tendency of the capital femoral epiphysis to shift posteriorly and interiorly through the epiphyseal plate, i.e., into varus position, with respect to the femoral neck. Its exact cause remains uncertain and in debate. Epiphyseal slip may be acute or chronic, abrupt or gradual. Several stages of progression are recognized in the displacement of the femoral head from its normal position centered on the axis of the femoral neck. A preslip stage is recognized clinically and by x-ray in which no, or very slight, displacement has occurred. The acute slipping stage implies sudden and considerable shifting of the epiphysis posteroinferior to the neck axis—actually an epiphyseal separation or fracture. In the chronically slipped stage, epiphyseal shift has gradually led to severe degrees of malposition. With closure of the epiphyseal line, concomitant with healing and remodeling of bone in the late stages of displacement and malunion, the residual stage is entered (Fig. 1).

Predisposition to displacement of the proximal femoral epiphysis has been most adequately explained on the basis of vascular disturbance at the epiphyseal plate. Softening of the plate probably under altered or abnormal endocrine influence, allows the epiphysis to shift on the proximal femoral neck through the provisionally calcifying zone of the epiphyseal plate. The precipitating factor is almost certainly trauma, be it repeatedly minor and unrecalled or definite and severe. Factors of age and sex are relevant to causation; incidence is highest at ages seven to fifteen and mainly in boys. Among the patients, two main

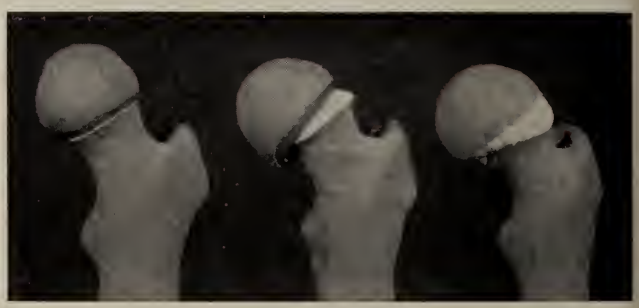


Fig. 1. Left to right, models showing the normal capital femoral epiphysis, acute slip, and residual or healed stages of slipping.

endocrine types frequently are noted: the rapidly growing, dolichomorphic adolescent, and the pyknic, obese type—in the latter patients the disease is reminiscent of Froehlich's adiposogenital diathesis (Fig. 2). The mechanical factor of overweight alone may be an important cause. Other long associated factors considered to be etiologic include metabolic disease, for example, pituitary or thyroid dysfunction, and infectious suppurative processes within the hip itself.

Onset of symptoms may be painful and dramatic and definitely associated with precipitating trauma. Usually, however, the onset is insidious, with a clinical history of gradually progressing or intermittent pain in the affected hip which is very often referred along the course of the obturator nerve to the antero-superior and medial aspect of the knee on the involved side. Knee pain alone may be present, an important diagnostic point, erroneously directing attention and roentgen examination to the wrong location. There is bilateral hip involvement in 25 to 35 per cent of the cases, including many with only unilateral signs and symptoms. Therefore adequate biplane roentgen examination of both hips is necessary in all cases. Usually there is a progressively painful

From the Section of Orthopedics, University of Michigan.

Based on a television program given at the 1955 Michigan Clinical Institute in Detroit.

limp, irritability of the hip, and difficulty in bearing weight. Rest relieves these symptoms; activity worsens them. On examination, irritability is quickly noted. There may be an established flex-



Fig. 2. A.B.—slipped upper femoral epiphysis of both hips in a twelve-year-old boy of pyknic habitus.

ion contracture at the hip. There is loss of internal rotation and increased external rotation; loss of abduction and increased adduction. It is important to note that when actively flexed, the hip demonstrates flexion combined with external rotation (Fig. 3). Thigh atrophy may be evident, and perhaps discrepancy in the length of the legs.

In the pre-slip stage, the symptoms may be so minor as to be overlooked, and there may be no disability at all. The complaint may be of knee pain only, with clinical findings limited to irritability of the hip and slight groin tenderness. X-ray films, both antero-posterior and lateral views, will demonstrate an almost normal hip joint. Closer scrutiny, however, particularly of the lateral view, will reveal a widening and irregularity of the epiphyseal line (Fig. 4). Occasionally the immediately subjacent diaphyseal area



Fig. 3. Patient in Figure 2 demonstrating hip flexion with external rotation on the right.

of the proximal neck will have a motheaten appearance with rarefaction in the proximal medial aspect.

Gradual slipping of various degrees, minimal to severe, can occur early with unrecalled specific history of trauma. Symptoms are progressive and clinical findings will be those described above. Roentgen examination in antero-posterior and lateral projections will now demonstrate postero-inferior positioning of the femoral head (Fig. 5). This may possibly be noted as a very slight varus position of the head in the antero-posterior view. The important lateral views, however, reveal posterior displacement of the head on the neck. In severe degrees of slipping the displacement will be quite obvious roentgenographically in all projections.

When there is an acute slip, a relatively rare occurrence, it is usually associated with definite trauma. Excruciating, disabling pain is experienced, and the clinical findings are characteristic of hip fracture, with tenderness, swelling, and marked irritability. The extremity is held in an attitude of external rotation, adduction and apparent shortening; x-ray films reveal various degrees of displacement of the femoral head posteriorly and inferiorly depending on the degree of slip (Fig. 6).

The imperative necessity for treatment as soon as the diagnosis is established is illustrated by the case of a boy, aged fourteen, who had a diagnosis of early slipped upper femoral epiphysis made

clinically and by x-ray and who was scheduled for operation. He was allowed to return home for a day, with instructions to walk on crutches and bear no weight on the affected joint. However, he did not return for two weeks, and then because of a complete epiphyseal slip (Fig. 7). He admitted having engaged in sports during this period. His operative treatment was considerably more extensive than first contemplated, and prognosis accordingly less favorable.



Fig. 4. Antero-posterior and lateral views of an eleven-year-old patient in pre-slip stage. Widening of epiphyseal plate is seen to advantage in lateral view of right hip.



Fig. 5. A.B.—antero-posterior and lateral projections of hips of patient shown in Figures 2 and 3. The heads are postero-inferiorly displaced. Early slips.

Slipped capital femoral epiphysis must be differentiated from early tuberculosis of the hip, congenital coxa vara, coxa plana, subacute infectious processes and fracture. When a positive diagnosis of slipped upper femoral epiphysis of any type or stage has been established clinically and by roentgen examination, it should be considered an urgent indication for surgical treatment. In the case of acute complete traumatic slip, a surgical emergency exists. The patient should be removed immediately from weight-bearing, to prevent the onset or the progression of epiphyseal displacement, and placed in axis traction for relief of pain and spasm and for immobilization of the extremity. Prompt surgical operative therapy designed to insure closure of the epiphyseal plate, while maintaining rigid head-neck fixation, is indicated. Pre-slips and early minimal to moderate slips are transfixed *in situ*. Severe and acute complete slips necessitate open reduction with internal fixation.

Definitive therapy has evolved over a considerable period, progressing from non-operative to operative treatment. It is now clear that bed rest, traction alone, manipulation and casting, bracing, splinting, non-weight bearing crutch-walking, and endocrine therapy are measures



Fig. 6. J.S.—acute complete traumatic slip.

which, singly and in combination, are considerably short of definitive. It is well recognized, for example, that slipping can occur and progress while the patient is at rest in a hip spica cast. Surgical



Fig. 7. M.I.—aged fourteen, with x-ray evidence of progression from early to complete slip in a two-week period. Note dates. There was known precipitating trauma in this case.

therapy is directed toward three objectives, according to the type and degree of displacement: (1) internal fixation *in situ;* (2) reduction—manipulative and/or open—and internal fixation, and (3) osteotomy, either transcervical or subtrochanteric with internal fixation, to correct established deformity. These techniques are designed to transfix and immobilize the epiphysis until closure of the epiphyseal line has occurred. Weight-bearing is not resumed until there is roentgenographic evidence of epiphyseal closure, usually in a matter of two to four months. Various internal fixatives such as nails, blades, pins, bone pegs, and screws, have had their vogue. Bone-pegging operations have been advised but they afford only poor mechanical transepiphyseal fixation. It is debatable whether bone-pegging promotes earlier epiphyseal closure.

The most satisfactory operative method appears currently to be the inserting of wood screws in the long axis of the neck so as to cross the epiphyseal plate and transfix head and neck. Hips with pre-slip are internally fixed with two screws, as are minimal slips, including displacements of not more than one-third the diameter of the femoral epiphysis. Greater displacements require careful open reduction and fixation (Fig. 8).

Medical aspects of therapy should not be overlooked. Weight reduction is essential. If there are specific indications for endocrine therapy, e.g., in the case of hypothyroidism or pituitary disease,

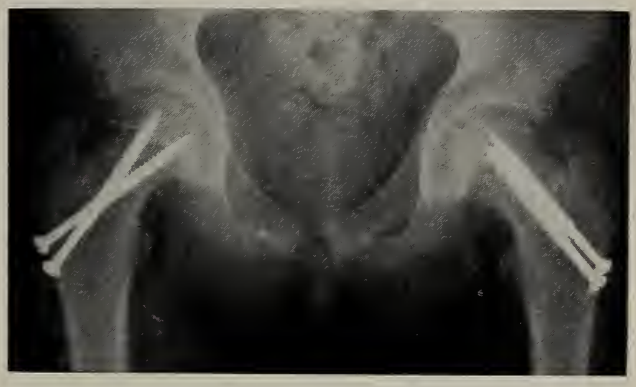


Fig. 8. A.B.—two-screw internal fixation following open reduction of early slip. Same patient as in Figures 2, 3 and 5.

this should be instituted.

If a slip is not recognized early, the hip may progress to the chronic healed stage, necessitating one of several types of osteotomy to correct the amount of deformity and improve the function of the extremity.

Conclusions

1. Emphasis should be placed on early recognition of slipped upper femoral epiphysis. Even if the initial roentgen examinations is negative, repeated clinical and roentgen examinations may confirm a suspicion.

2. Once diagnosis is established, only operative therapy is definitive therapy.

3. Roentgen examination is incomplete unless the x-ray films include biplane and bilateral views.

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Detroit Surgical Society

Meeting of November 28, 1955

DIVERTICULA OF THE JEJUNUM AND ILEUM

By Paul J. Connolly, M.D.

Osler, in 1881, described a case of multiple small bowel diverticulum. Since then, 400 cases have been reported. The author presents seven cases he has seen, and four others found by other Detroit doctors.

The incidence appears to be about 0.5 per cent, but has been reported as high as 1.3 per cent. They are difficult to find since they present no definite symptom complex, and are difficult to demonstrate by x-ray.

This diagnosis should be considered when vague abdominal symptoms are present. Medical treatment suffices in most cases, but where this is unsatisfactory, or where complications arise, resection of the involved segment of bowel is the best procedure.

A STUDY IN THE PREVENTION OF TRANSFUSION HEPATITIS

By E. R. Jennings, M.D., William Hindman, M.D., and O. A. Brines, M.D.

A study is in progress at the Detroit Receiving Hospital to determine the usefulness of the thymol turbidity test for the exclusion of blood donors who may serve as carriers of the virus of transfusion hepatitis. About 3 per cent of blood donors have a thymol turbidity of their serum in excess of 8 Shank-Hoagland units. To date, 117 patients have returned for follow-up studies after having received whole blood from apparently healthy donors who had positive thymol turbidity tests. Six of these recipients have developed hepatitis and an additional six patients have some clinical or laboratory findings suggestive of this disease. The incidence of hepatitis in these recipients is from ten to twenty times that which is expected in ordinary civilian blood transfusion service. It is, therefore, recommended that these tests be a routine post-transfusion study of the donor, and that the blood from donors whose thymol turbidity tests are in excess of 8 Shank-Hoagland units be not used for whole blood transfusion. That the thymol turbidity test will not entirely eliminate this hazard of blood transfusion is illustrated by the presentation of ten cases of serum hepatitis, in which all of the donors for these transfusions had negative thymol turbidity tests.

CARCINOMA IN SITU OF THE UTERINE CERVIX

By Lyndon Lee, M.D., P. J. Melnick, M.D., and Harry Walsh, M.D.

Cytologic screening was carried out in over 8,500 women in Puerto Rico. Pelvic examination and biopsy of the cervix was performed in 584 cytologically suspicious cases. Sixty-seven cases of carcinoma *in situ* were thereby discovered and certain abnormal hyperplasias were found in a large series of these histologic specimens. Significant series of each of these entities including carcinoma *in situ* are being followed untreated to determine their ultimate fate.

Sixty-seven cases of carcinoma *in situ* were discovered in this study. Fifty-three of the sixty-seven cases have been followed up to three years with cytology every month and biopsy every six months. Thus far, there has been no evidence of invasion in any of these fifty-three cases. Follow-up is planned to continue indefinitely unless histologic evidence of invasion develops.

In twenty-two cases of carcinoma *in situ*, follow-up biopsies consisting of endometrial curettings, endocervical curettings, squamocolumnar junction biopsies, biopsies of the portio, and biopsy of the vaginal mucosa are being examined by histochemical methods. Glycogen and PAS positive material in varying amounts are found in the areas of carcinoma *in situ* in all cases. Other histochemical studies are in the process of being carried out and will comprise a portion of this report.

In the course of these studies, five cases were encountered in which other neoplastic processes were discovered adjacent to the carcinoma *in situ*. These will be discussed. The suggestion is that the occurrence of carcinoma *in situ* reflects a tendency of the involved cervix as a whole to develop neoplasm. The possible role of the abnormal hyperplasias as stages in the evolution of invasive neoplasm is postulated. Methods for developing agreement in terminology, classification and interpolation among various systems is needed in clinical, cytologic, and pathologic categories for the study of these entities. Possible methods are presented.

From the Cancer Program of the Government of Puerto Rico and the Wayne County General Hospital, Eloise, Michigan.

President's Message



Looking Up

During the last few years, I have met many doctors of medicine under many different circumstances. To my knowledge, I have never met a doctor who doesn't believe in God or have a deep respect for religious people. Yet, frankly, how many of us doctors make use of one of the greatest sources of power in the world—*Prayer?*

A great scientist, Dr. Alexis Carrel, has said "Prayer is a force as real as terrestrial gravity. . . . When we pray, we link ourselves with the inexhaustible motive power that spins the universe." We dare not ignore a power like that.

Look at the strides that have been made in the science of medicine during the last thirty years. You cannot help but be amazed and filled with admiration for the men of science who have made this possible. At the same time, any thinking man is grieved and bewildered that we have made so little progress in human relations. We can do more now for sick people in a shorter time than ever before. But are we able to help them more morally and spiritually?

The charge has been made that today's doctors are too materialistic. But most of the doctors that I know are dedicated men, concerned for people, putting service above self. When a doctor is asked what gives him the most real pleasure, he usually tells you how he has helped some individual. Rarely does money enter the picture there. Notwithstanding, many people think that doctors are too concerned with material things.

Perhaps this ought to be a warning to us. Perhaps, in our prosperity and self-sufficiency, we are forgetting the Source of all things—God. We need a moral and spiritual renaissance if we are to keep people's confidence and trust.

That is why I call us to renew our faith in prayer. There are many threats to the health welfare of our nation. In order to give the best medical care and improve human relations, we need to pray. To pray is not a sign of weakness. It takes courage for a man to recognize and admit his limitations, to rid himself of arrogance and humble himself before the Almighty. Great men pray. Only little men feel no need of prayer.

We doctors are justly proud of our position, our training and experience. We would like to be looked up to, in the finest sense. We must, then, never forget that the man who is looked up to is the man who each day himself spends some time in "Looking Up."

W. B. Jones.

President, Michigan State Medical Society

Editorial

DEDICATION

THE JOURNAL is happy to dedicate this number to the University of Michigan Medical School in recognition of its great progress and ever-increasing facilities. It is now graduating probably as many students as any medical school in the world.

The papers from Ann Arbor published in this number were especially prepared by a committee appointed by Dean A. C. Furstenberg.

TWO COURT DECISIONS

OCCASIONALLY, medical problems get before the courts, and decisions are made. In the not too distant past, the Michigan Supreme Court, in a decision bearing upon a group of tax-supported hospitals, quashed all authority except the State Board of Registration in Medicine, to limit or in any way control the medical practice in those hospitals.

Albert vs. Grand View Hospital et al.—The Supreme Court of Michigan on November 30, 1954, ruled:

(15) "The defendant board of trustees has no power, by rule, regulation or otherwise to regulate the practice of medicine or surgery in Grand View Hospital.

(16) "Articles (ten listed) do so attempt to regulate the practice of medicine and surgery in Grand View Hospital and consequently they are void and of no effect and the same are hereby set aside.

(17) "The lawful power to discipline any duly licensed physician and surgeon or to suspend or revoke his right to practice in any public hospital organized and existing under Public Act 1913 No. 360 as amended, is exclusively committed to the State Board of Registration in Medicine."

Quoting from an editorial in THE JOURNAL of the Michigan State Medical Society, March, 1955, page 342:

"If such police power has been delegated to the State Board of Registration in Medicine in one hospital, what is to prevent the same application to rules made in any other."

Reporting that decision, we suggested that only one step further would completely negate the efforts of all the specialty boards and others to insure to our patients well regulated and trained medical attendants.

A suit January 21, 1955 (JMSMS, page 483, April, 1955) in Allegan County attempted to circumvent the controls in another hospital and force staff acceptance in spite of medical and hospital regulation, claiming interference with the plaintiff's practice of medicine. Part of that suit is still pending, and its outcome could be vastly important.

Now a district court in Iowa has decided another point. Groups of doctors for years have complained that they were not recognized as doctors—that the medical societies ignored them, that Blue Cross—not Blue Shield—paid for their services. We refer primarily to laboratory workers—pathologists, radiologists, physiatrists, who are actually or apparently employees of hospitals. The medical societies and medical service plans have been unable to resolve the problem but have advised these groups to make their own contact with patients, to render their own bills and be assured of professional recognition.

The Court of the Ninth Judicial District of Iowa, on November 28, 1955, rendered a decision. The essential part was mentioned last month on page 10. The Court decided that:

"The work done by the pathologist, radiologist, and the technicians working in the pathology and x-ray laboratories constitutes the practice of medicine.

"The privilege of practicing medicine is a personal one requiring qualifications which cannot be met by a corporation.

"If the non-profit corporations operating hospitals are to practice medicine it is for the legislature to say by proper definite legislation.

"It is the conclusion of the Court that the pathologist or radiologist by permitting a hospital to bill for medical services in the name of the hospital without the consent of the patient or his legal representative, violates the provision of subsection 4 of section 147.56."

The District Court opinion stands unless reversed by the Supreme Court.

This decision in Iowa raises questions about long-continued practices. According to this ruling, most of the hospitals in Michigan and in other states are guilty. Some famous institutions and many famous doctors would come under this rul-

ing. How about the great clinics which employ doctors not only as laboratory specialists, but as internalists or as surgeons. Some corporations in Michigan whose doctors are salaried charge their patrons for room, board, and medical services.

At the AMA Boston meeting, the Iowa Medical Society officials were much concerned. Most thought the case would surely go to the Supreme Court, while others figured some way around it would be found.

The Iowa opinion to date is the only controlling court decision, and surely opposes some practices which the AMA has condoned. We shall see. In the meantime, certain of our doctors and most of our hospitals must beware.

1956 LEGISLATION

ANOTHER piece of legislation needed on the national level is provision for payroll withholding for federal employes. This refers to Community Chest Funds, Government Savings Bond, Prepayment Health Insurance, et cetera. The Post Office employes would have subscribed for Michigan Blue Cross and Blue Shield many years ago if this could have been arranged. It would be so simple. A very short permissive joint resolution would do, or a regular act of Congress. Years ago, Senator Taft made that proposal but his federal health program fell through.

Another permission needs to be granted. The various State Departments of Social Welfare should be allowed to pay doctors (and hospitals) directly for various services rendered to Old Age Assistance, dependents and the blind. This is a program using federal funds with matching by the states or local counties. The President, in his program last year on the health of the nation, advocated solving this problem. One of the suggestions was the "reinsurance" which was to allow insurance for such people who are not now insurable. He still advocates action.

Recently a communication from the A.M.A. headquarters offices in Washington, D. C., asked for suggestions on how to solve this problem. Conferences in Michigan about seven years ago with medical representatives, the Michigan State Department of Social Welfare and Michigan Medical Service uncovered the unsatisfactory present payments to the patient who is supposed to pay the doctor, but sometimes does not.

The Department of Social Welfare was willing to contract with one of the County Medical Societies (Calhoun) for a trial run to determine the feasibility and costs. The County Society at that time was willing to try it for a year on the exact payments the Department had been doling out to the patients for medical care. An actual saving was anticipated, and Michigan Medical Service was willing to administer the program as an experiment. The program was ready to start but the Federal Government disapproved because of the policy that since federal funds were involved, the Department could not pay the doctor direct, but must give the money to the patient.

We suggest permission for such payments, if and when the Department wishes. The argument that such payments are unlawful fails because that has been done by the Veterans Administration for ten years in home town care of service-connected disabled veterans.

DEPENDENTS OF THE MILITARY

PROPOSALS to provide medical care for dependents of the military have been many. Service men's families have been eligible for care in military hospitals, if available. (Many doctors have been drafted into the service to care for these people and we object to this draft). Care for those where service hospitals are not accessible is the especial problem. Authorities have been conferring on providing all medical care through some form of insurance. Blue Shield and Blue Cross have been active in offering their services.

The administration now seems especially interested and would like estimates of the exact costs for this complete full coverage. Again figures are not known, as this has never before been done. The Blue Shield Commission has proposed a trial of cost plus administrative expense plus a small percentage for profit. With the enormous number which will be involved and the removal of several million of potential patients from the field of private practice into a rapidly growing total of government medicine, we should not be asked to forego a reasonable profit. If this service is to be offered to these dependents, government must recognize its responsibility. The government must be prepared to underwrite the risk instead of expecting private citizens to do so.

WE CAN'T GO BACK

BLUE CROSS and Blue Shield were born in times of duress. The health care of most of our people had become more and more the responsibility of relief agencies and the Government Social Security departments. The early 1930's found industry and our national economy in bad straits. There was no money, few jobs and no security in any jobs, but our patients still became ill. Hospitalization in many cases was an impossibility, and in most a complete calamity. The medical profession answered sick calls then if they wished to eat, but the patients could not pay—at most perhaps a dollar, and we remember many of our people paying twenty-five cents a week. Even doctors were actually on the relief rolls.

There were casualty and health insurance companies which paid their insured up to $25.00 a week for loss of time due to accident or illness, but the first week did not count. The profession begged for more realistic insurance and were told medical and hospital insurance was impossible. In various parts of the country, there were a few small hospital insurance plans in operation and doing a fair job, but there was none in Michigan. Medical Service plans that would care for the catastrophic cases in the hospital were dreams that after ten years materialized. Michigan was the first to have a plan on any great scale, although California inaugurated a limited plan a month before we did. There were some small plans in Oregon and Washington, and one at Baylor University, but we had no information on them.

Our pioneers envisioned a service for those whose needs were desperate. In those days, a hospitalization of several days' duration used up all the reserve most of our people had saved, and for the majority made a debt for months or years to come. Complete health service was undreamed of. MMS started with only surgery in the hospital and only those cases so severe they must be hospitalized. When Battle Creek started on serious plans, a company in Detroit was found which sold limited hospitalization insurance. Before establishing the medical care plan, more than 2,000 policies were sold in Battle Creek giving much relief for our patients' difficulties.

The Michigan Society for Group Hospitalization (Michigan Hospital Service) started operations in 1939, and Michigan Medical Service followed a year later, selling its first certificates for surgery in the hospital for 40 cents a month. That was absolutely ridiculous, but was made to work. The intention was only to cover surgery which could not be done in the home or office but required hospitalization.

The two plans were sold together, as Michigan Medical Service was not salable without Michigan Hospital Service. Our patients and organized labor were "sold" at once, as indicated by the rapid growth. But demands soon came for more benefits. Patients began demanding to go to the hospital for minor surgery, and the hospitals were not averse to this because they could operate better with more beds occupied and could make their finances balance—an almost unknown fact. Previously, most hospitals had been heavily endowed, but those endowments were getting scarce because of confiscating taxes; of the great depression and of the consequent unemployment. Soon there were no rich fortunes to leave money for hospitals. Taxes had done a job. Then most hospitals were beneficiaries of our "relief funds" or "welfare funds," later called "Community Chest."

With Michigan Hospital Service paying increasingly higher percentages of hospital bills, all hospitals having consequently fewer uncollectible accounts were glad to receive the added patients. The public clamored for increased service, employment was the same, and everyone seemed to accept the increased usage. Michigan Hospital Service was forced to increase premium rates frequently in order to cover this increased usage. Michigan Medical Service soon (although that was over ten years ago) increased its rates to cover more liberal demands of service. Constantly, during the years, items of service have been added. Whenever Michigan Hospital Service has to ask increased rates, we hear our doctors complain of one item in particular. Why make these people go to the hospital to be cared for? Liberalization authorizing certain surgery in the office was tried, but abuses were uncovered.

A situation had developed which can not revert to other times. Policies have been established by three demands: the patients for more liberal care, the hospitals for more bed usage, and the doctors to satisfy their patients, for they could have done most of the minor surgery in homes or offices as first intended. Michigan Hospital Service now has found it necessary to ask rate increases, and labor is protesting to the insurance commissioner not to grant increased rates. Union officials knew

well what would happen. They actually argued at the Board meeting authorizing the rate increase request, that the hospitals economize and absorb the extra costs.

We quote from Ford Local's resolution sent to the Governor, legislature and Congress:

"Private hospital, medical and surgical insurance is necessary because of the lack of an overall government program securing the health of the people" and "we demand of our representatives in Congress and the State Legislature to intensively press for state and national legislation which will afford all with proper overall medical care without cost of the individual."

James Brindle, Director Social Security Department UAW-CIO, at the Annual Meeting of the American Association of Medical Clinics in Minneapolis on November 5, 1955, said:

" . . .to some extent, labor's views can be read in what it had done about health care. Both major labor federations and practically all individual unions have backed and continue to support federal legislation for a national health insurance program." . . . " A recent study in Michigan indicates that as much as 19 per cent of hospital bed care constitutes faulty use in term of the medical necessity for hospitalization. In other words practically one-fifth of the premium is wasted."

The Union has notified the state officials and federal congressmen of their demands that "if the doctors and the hospitals" cannot solve these problems, they will reiterate their all-time ambition that Government take over the health care and give it "without cost" to all the people. Does this mean that labor is determined to cause the insolvency of the Michigan Hospital plan as a step in their long-time program of socialism?

In five years organized labor has caused 86 per cent of the increased hospital costs by increases of its own wages. They should accept new adjustments in the hospital the same as for automobile prices. Instead, they are continuing to ask for health services at "no cost" to themselves. Socialized Medicine is still actually their goal.

BLUE CROSS RATE INCREASE

MICHIGAN Hospital Service and the requested premium rate increase has been stressed because of several items with which our doctors may not be familiar.

There has been a steadily advancing rate of utilization, as we have reported. Also, the stay in the hospital which lessened for a while under "early ambulation" now seems also to be on the increase. About 90 per cent of the greater costs are in the personnel department with more employees, fewer hours, and more pay. All other costs combined have advanced very slowly.

The doctors are getting the blame. We hear the complaint from labor leaders that it is the doctors who send the patients into the hospital, issue orders for services, and then release them. Labor also claims Michigan Medical Service is increasing its rates, which is absolutely not true. Read this from Ford Local No. 600:

"Resolution opposing the proposed increase in Blue Cross and Blue Shield Rates"—"Whereas the services rendered by Blue Cross and Blue Shield have not increased in comparison with the premium rate increase which already amounts to approximately 100 per cent since 1948."

Blue Cross hopes to continue the services its subscribers have demanded. Labor's wages and ancillary benefits have probably almost reached 100 per cent during this same period, yet have their services increased? The hours have lessened and the work capacity hopefully is equal; but those costs have increased. Industry has accepted the inevitable, why not the union leaders?

EDITOR'S NOTE.—On January 9, the Insurance Commission granted a 15 per cent increase. For the second time too little is allowed and too late to become effective in February as was asked.

A PUBLIC TRUST

One Thursday in November, 1947, the late Senator Arthur H. Vandenburg asked his physician, A. B. Smith, M.D., of Grand Rapids, to invite some of the officers of the Michigan State Medical Society and of Michigan Medical Service to a dinner conference. After a series of questions as only he knew how to ask, the Senator said:

"You have done something in Michigan that you didn't know you were doing. You have established a public trust. Your Michigan Medical Service and Hospital Service—Blue Cross—are a public trust. You didn't intend to do it, and you didn't know you had done it, but you have. You have taken $50 million of the people's money and used that sum for the benefit of the people. In so doing, you are the trustees of a public trust. Your Michigan Medical Service has done more than any one project to stay the progress of socialized medicine in the United States, and as long as you continue such service, no power can establish socialized medicine."

To bring the Senator's information up to date, Michigan Medical Service has paid a total of $173,345,302.08. This includes $23,161,127.39 for nine months of 1955. The cost of administration the first five years was 12.46 per cent. For the last five years, it has been 9.48 per cent; 9.23 per cent; 8.64 per cent; 8.76 per cent and 8.78 per cent (nine months), respectively.

Richard H. Meade, M.D.

Both Master and Student of Thoracic Surgery

Richard H. Meade, M.D., of Grand Rapids, is an urbane and pleasing gentleman; a dedicated and able physician whose work has taken him to medical centers in almost every corner of the world. He is a gentleman by heritage, a physician by choice.

Dr. Meade is a direct descendant of Andrew Meade, who came to New York from Ireland in 1685 and moved to Virginia in 1690. A military member of the family, General Everard Meade, was on General Lincoln's Staff in the Revolutionary War. Richard Meade was the first member of the family to become a doctor.



The inspiration to study medicine came during his early college days. While attending a YMCA convention in Georgia, a persuasive speaker urged the young men to choose a career in a field where they could best serve humanity. He cited the dire need for doctors in China. Dick Meade there and then decided to study medicine. In 1921, he graduated from Harvard Medical School.

Born in Richmond, Virginia, in 1897, his early schooling was gained in Richmond Academy, Virginia Military Institute, and Richmond College. He entered the University of Virginia in 1915 and received his B.S. degree two years later.

Following his graduation from medical school, he spent some months as a Fellow at Trudeau Sanatorium, interned at Willard Parker and Presbyterian Hospitals in New York, then undertook six months of postgraduate study at the University of Pennsylvania in 1924, before setting out for China. Young Dr. Meade first became an assistant resident and volunteer assistant in surgery at Peking Union Medical College. In 1926, he became a surgeon at St. James Hospital at Anking, under auspices of the mission of the Protestant Episcopal Churches of the U.S.A.

During 1927, Chiang Kai Chek, who had been Secretary to Sun Yat Sen, China's first President and the father of Modern China, took control of the government and moved down the Yangste River toward Shanghai. One regiment of Chiang's troops attacked the foreigners, murdering them, and burning homes. Only the intervention of the American and British navies made it possible for any foreigners to escape. Dr. Meade, with his wife and eighteen-months-old son were among those able to leave China safely.

Returning to his native Virginia, he became Assistant Professor of Surgery in the University where he remained until 1931. Doctor Meade then went to the University of Pennsylvania as an associate in surgery with staff positions as associate surgeon at Episcopal Hospital, Philadelphia, and consulting surgeon at the Home of Consumptives. In 1941, he also became Chief, Division of Thoracic Surgery, Department of Tuberculosis, at Post Graduate Hospital.

Characteristically and early, Doctor Meade, who is always interested in new developments in medical and other fields, turned his attention to thoracic surgery—a branch of surgical endeavor given great emphasis during and after World War I. In these war years, a relatively small group of surgeons interested in the field began holding informal meetings, eventually organizing as the American Association for Thoracic Surgeons in 1918. Upon his return from China, Richard

Meade began participating in activities of this new group, which was enlarging with the rapid development of thoracic surgery.

He became that organization's secretary in 1935, serving for twelve years. This position gave him an excellent opportunity to become acquainted with members of the Association in this and other countries. From 1938 to 1947 he was an Associate Editor of *The Journal of Thoracic Surgery,* official publication of the Association, and since then has been a member of the Advisory Editorial Board.

This year, Dr. Meade is President of the American Association of Thoracic Surgery, an appropriate tribute to a surgeon who has made many contributions to surgical knowledge, and who has served this organization well.

Shortly after the outbreak of World War II, he volunteered for the Army Medical Corps and was commissioned a major in May, 1942. Dr. Meade immediately found his place as Assistant Chief of the Chest Surgical Section of Fitzsimons General Hospital at Denver. Eight months later he was transferred to Kennedy General Hospital at Memphis, where he served the remainder of the war as Chief, Chest Surgery Section, attaining the rank of lieutenant colonel. For his wartime service, Dr. Meade was awarded the Legion of Merit in 1946.

Leaving military service he accepted a position as an associate in surgery at Northwestern University and was an attending surgeon at the Hines Veterans Hospital, Chicago. In 1948, seeking a more placid background for living, Dr. Meade moved to Grand Rapids to practice and to participate in the development of thoracic surgery in Western Michigan, with consulting positions on the staffs of Blodgett Memorial, Butterworth, and St. Mary's hospitals, and Sunshine Sanatorium.

Having the curiosity of a natural scholar, Dick Meade is an avid reader of medical literature. Always interested in writing about his own experience, he has published many articles in medical journals. He has traveled widely in this country and abroad, usually visiting medical centers.

During his most recent tour, in the summer of 1955, he visited important European centers where cardio-pulmonary surgery is done. He found cardiac work being performed much as it is here.

Dr. Meade currently is working on a history of thoracic surgery, a subject for which he is well qualified because of his own long experience and interest in this field and because of his acquaintance with the work of so many thoracic surgeons throughout the world.

Besides his medical interest, he has many hobbies. The chief avocations seem to be natural history, golf, and sunshine. He may at times be seen motoring with cartop down even in wintry Grand Rapids weather.

Dr. Meade is the father of four sons, one of whom is also a graduate of Harvard Medical School and is now Chief Resident Physician at Haynes Memorial Hospital in Boston.

Richard Meade is a sincere man, a true physician, who applies the Hippocratic principles not only in the practice of medicine but in all human relationships.

—Richard A. Rasmussen, M.D.

ADVICE TO A PROSPECTIVE MEDICAL STUDENT

The best advice I can give you is this: from your first day in pre-med, study hard and get a good scholastic standing. Entrance to the medical school depends on several factors, but one of the most important things that is considered by a Committee on Admissions is your transcript from the Liberal Arts School. I grant you that high marks do not always indicate that the individual will be a success in medicine, but a good record does show that for the three or four years of pre-medical work he has shown ability to consistently concentrate and make good grades. Nothing is so fatal as to make a poor showing for a term or two and then get good. It is the whole course that is considered. All during your medical course you will have to study hard. And you will have to continue to study all your life to try to keep up with the constant advances in medicine.

From the first day of your work you will come in contact with names—names of men, women, tests, chemical reactions with names attached to them. Start right off in the beginning by looking up these names. You use the microscope—who invented it? In this way, the dictionary and the medical history book will give you a valuable background for your future in the medical school and also for your life as a doctor.—W. J. Stapleton, Jr., *Detroit Medical News,* July 4, 1955.

Michigan Clinical Institute

Sheraton-Cadillac Hotel, Detroit

Wednesday-Thursday-Friday, March 7-8-9, 1956

Technical Exhibits

Abbott Laboratories — **Booth No. 57**
North Chicago, Ill.

A. S. Aloe Company — **Booth No. 62**
St. Louis, Missouri

Visit Booth No. 62 where your Aloe representatives, Tom and Wally Boufford, will be on hand with a cross section of the complete line of physicians' equipment and supplies carried by the A. S. Aloe Company.
The Bouffords will be pleased to discuss mutual items of interest with you.

American Ferment Company, Inc. — **Booth No. 64**
New York, New York

Our unique demonstration of the proteolytic activity of Caroid will explain why addition of Caroid to Caroid and Bile Salts Tablets and Alcaroid provides unusual advantages when laxation or antacid therapy is indicated. Other products featured will be the palatable Essence of Caroid for improving digestion and utilization of dietary proteins; and Supligol, the whole bile-ketocholanic acid compound for management of early biliary dysfunction.

Ames Company, Inc. — **Booth No. 25**
Elkhart, Indiana

The Ames representatives, Messrs. Ralph Matheny and Roger Gosling, will be on hand to discuss AMINET, a combination of Aminophylline and Pentobarbital in a newly developed nonreactive base which melts readily at body temperatures and quickly releases the active ingredients for rapid absorption. Highly effective in relieving the paroxysms of bronchial asthma and especially valuable with epinephrinefast patients. Also of value in cardiac asthma, congestive failure, and as a diuretic and myocardial stimulant.

Audio-Digest Foundation — **Booth No. 1**
Glendale, California

Audio-Digest Foundation—a subsidiary of the California Medical Association—gives the busy physician an effortless tour through the best of current medical literature each week. This medical tape-recorded "newscast"—compiled and reviewed by a professional Board of Editors—may be heard in the physician's automobile, home or office. The Foundation also offers medical lectures by nationally-recognized authorities.

Ayerst Laboratories — **Booth Nos. 7 & 8**
Chicago, Illinois

Baker Laboratories, Inc. — **Booth No. 52**
Cleveland, Ohio

You are invited to visit our booth where Baker's Modified Milk and Varamel, two successful products for infant feeding, are on display.
Baker representatives will be glad to discuss the practical application of Grade A milk, adjusted fat composition, zero curd tension, synthetic vitamins and other important factors which help to eliminate many of the problems in modern infant feeding.

Carroll Dunham Smith Pharmacal Co. — **Booth No. 45**
New Brunswick, N. J.

Chicago Reference Book Company — **Booth No. 73**
Chicago, Illinois

Ciba Pharmaceutical Products, Inc. — **Booth No. 5**
Summit, New Jersey

The CIBA exhibit features SERPASIL—the original, pure crystalline alkaloid of Rauwolfia. SERPASIL has been found extremely useful as a tranquilizer in treating patients whose adjustment to life is complicated by anxiety, irritability and various psychoses. Patients feel calm, yet in properly adjusted doses retain their drive and energy. It is highly effective in many conditions where barbiturates have been commonly prescribed.

Coca-Cola Company — **Booth Nos. 65 & 66**
Atlanta, Georgia

Ice cold Coca-Cola served through the courtesy and co-operation of the Detroit Coca-Cola Bottling Company and the Coca-Cola Company.

Cunningham Drug Stores, Inc. — **Booth No. 42**
Detroit, Michigan

A simulated dispensing counter to be erected across the back of booth, showing some of the efficient methods used in the filling of prescriptions in the Cunningham Stores.
A small stand placed at the front of the booth will display some of the services available to physicians, such as prescription blanks, product information, et cetera.

Davis & Geck, Inc. — **Booth No. 63**
Danbury, Connecticut

Davis & Geck will feature their new Surgilope* sterile suture pack. No glass tube to break. Other D&G "firsts" on display include Surgaloy® stainless steel suture, U.S.P., Spiral Wound surgical gut, silk and cotton, and Melmac® resin plaster of Paris bandage.

*Trade-mark

Desitin Chemical Co. — **Booth No. 22**
Providence, R. I.

DESITIN OINTMENT: the pioneer in external cod liver oil therapy.
Indications: diaper rash, slow healing wounds, burns of all degrees, lacerations, hemorrhoids and fissures.
DESITIN POWDER: a unique, dainty medicinal powder saturated with cod liver oil.
DESITIN HEMORRHOIDAL SUPPOSITORIES with COD LIVER OIL: coats ano-rectal area with soothing, lubricating cod liver oil, gives prompt relief of pain, allays itching.
DESITIN LOTION: the original cod liver oil lotion, soothing, protective, mildly astringent and healing, in non-specific dermatitis, pruritus, poison ivy, et cetera.

Detroit Creamery Co. **Booth No. 48**
Detroit, Michigan

Sealtest
TRADE MARK
DAIRY PRODUCTS

The Detroit Creamery Company and Ebling Creamery Company, local distributors of Sealtest Milk and Dairy Products, invite you to stop at the Sealtest booth and enjoy a complimentary bottle of Sealtest Milk.

Doho Chemical Corporation **Booth No. 10**
New York, N. Y.

DOHO CHEMICAL CORPORATION is pleased to exhibit:

AURALGAN, the ear medication for the relief of pain Otitis Media and removal of Cerumen;

NEW OTOSMOSAN, the effective, non-toxic ear medication which is Fungicidal and Bactericidal (Gram negative-Gram positive) in the suppurative and aural dermatomycotic ears;

RHINALGAN, the nasal decongestant which is free from systemic or circulatory effect and equally safe to use on infants as well as the aged.

Mallon Chemical Corporation, subsidiary of the Doho Chemical Corporation, is also featuring:

RECTALGAN, the liquid topical anesthesia, also for relief of pain and discomfiture in hemorrhoids, pruritus and perineal suturing.

DERMOPLAST, in an aerosol freon propellent spray for fast relief of surface pain, itching, burns and abrasions. Also for obstetrical and gynecological use.

Electro-Therapeutic Instrument Co. **Booth No. 36**
Chicago, Illinois

MYOFASCIATRON — The electronic automatically controlled low voltage muscle stimulator. Used in adjunct therapy for rehabilitation of atonic muscles in post fractures, sprains and strains, dislocations and other trauma of the muscle and skeletal systems. Automatic control enables the busy doctor to give patients benefits of muscle rehabilitation and stimulating therapy.

Encyclopaedia Britannica **Booth No. 37**
Detroit, Michigan

Encyclopedia Americana **Booth No. 33**
Grand Rapids, Michigan

We invite all members and guests to visit Booth No. 33 and inspect the latest edition of *Encyclopedia Americana*. As one famous librarian writes: "There is no substitute for quality in the reference field. That quality is *Americana*."
ALL WHO REGISTER WILL RECEIVE BY MAIL A 48-PAGE ATLAS IN FULL COLOR WITH OUR COMPLIMENTS.

Executone Company of Detroit **Booth No. 35**
Detroit, Michigan

At the Executone Booth, there will be "live" demonstrations of Executone's latest electronic intercommunication systems, engineered and designed for use by the physician in his private offices, or in clinics and Medical Centers. Doctors will be shown how these communication systems save doctors' precious time and energy, help him see more patients each day, help him and his nurse run the office more efficiently and with less effort.

Geigy Pharmaceuticals **Booth No. 29**
New York, N. Y.

MEDOMIN—a new kind of barbiturate—will highlight the GEIGY Exhibit. Indicated for safe, gentle hypnosis and reliable, sustained sedation. MEDOMIN is unique in that a 7-member ring is attached to the barbiturate radical. Also featured will be BUTAZOLIDIN, nonhormonal anti-arthritic; EURAX, antipruritic and scabicide; and STEROSAN, bacteriostat and fungistat.

Gerber Products Company **Booth No. 30**
Fremont, Michigan

WHEN MILK IS CONTRAINDICATED as the basic food for infants, Gerber "Meat Base Formula" can provide a nutritionally adequate replacement. It is well accepted and tolerated by infants of all ages. Your Gerber detailman invites you to evaluate "Meat Base Formula" and the complete line of supplementary baby foods.
You are also invited to review new editions of Gerber baby care and adult special diet booklets. Each is designed especially for distribution by physicians. Each provides non-controversial information in simple, easy-to-understand language. The service is complimentary.

Hack Shoe Company **Booth No. 3**
Detroit, Michigan

RIPPLE SOLE Shoes will be demonstrated. Latest of a long line of innovations developed by the forty-year-old Hack Shoe Co., RIPPLE Sole Shoes render walking and standing easier and more comfortable.
Other Hack Shoes on display include TRIBALANCE shoes for men and women; regular and supportive shoes for children.

J. F. Hartz Co. **Booth No. 43**
Ferndale, Michigan

On exhibit in the J. F. Hartz Co. booth will be a complete line of surgical instruments, including cardiovascular and thoracic instruments. Also shown will be Welch-Allyn diagnostic instruments, the Cardi-cator and Raytheon's new E.K.G. unit.

Holland-Rantos, Inc. **Booth No. 61**
New York, N. Y.

Physicians interested in Medical Contraception are invited to discuss with H-R representatives latest information on laboratory and clinical data concerning efficacy of *Koromex* products. Also featured will be the trichomonacidal, fungicidal and bactericidal *Nylmerate Jelly* and Solution which provides an effective, low-cost, and conveniently used therapy in vaginitis cases. Ask for sample of *Hollandex* Medicated Skin Ointment that combines benefits of a silicone and improved lanolin base, plus natural vitamins A and D.

G. A. Ingram Co. **Booth Nos. 67 & 68**
Detroit, Michigan

A. Kuhlman & Co. **Booth No. 32**
Detroit, Michigan

A Kuhlman & Co. invite you to see an exhibit of diagnostic and surgical instruments as well as the latest examining room furniture and physical therapy equipment.

Lea & Febiger **Booth No. 70**
Philadelphia, Pa.

Be sure to see these new books and new editions: Wohl and Goodhart—Modern Nutrition in Health and Disease; Soffer—Diseases of the Endocrine Glands; Katz and Pick—Clinical Electrocardiography; Gold-

berger—Heart Disease; Master, Moser and Jaffe—Cardiac Emergencies and Heart Failure; Burch and Winsor—Primer of Electrocardiography; Bailey—Surgery of the Heart; Stimson—Fractures and Dislocations; Lewin—The Back and Its Disk Syndromes; Twiss and Oppenheim—Disorders of the Liver, Pancreas and Biliary Tract; Herbut—Pathology; and many others.

Lederle Laboratories **Booth No. 26**
Pearl River, N. Y.

You are cordially invited to visit the Lederle booth where medical representatives will be in attendance to provide the latest information and literature available on our line. Featured will be Achromycin, Incremin, Diamox, Vitamins, Pathilon, Varidase and many other of our dependable quality products.

Liebel-Flarsheim Co. **Booth No. 46**
Cincinnati, Ohio

The Liebel-Flarsheim Company cordially invites you to visit Booth No. 46 in which their latest electro-medical-electrosurgical equipment will be exhibited. We ask particularly that you stop and see the L-F BasalMeteR, the first automatic, self-calculating metabolism unit ever offered. Capable representatives will be on hand at all times.

Eli Lilly & Company **Booth Nos. 54 & 55**
Indianapolis, Indiana

You are cordially invited to visit the Lilly exhibit located in space numbers 54 and 55. The display will contain information on recent therapeutic developments. Lilly salespeople will be in attendance. They welcome your questions about Lilly products.

M and R Laboratories (See Ross Laboratories)

Maico Detroit Company **Booth No. 69**
Detroit, Michigan

Ninety per cent of all the precision hearing test instruments used by hospitals, schools and physicians in the United States are Maico. The new Maico Transistor hearing aid is so small and light that it is used in conjunction with one's eyeglasses. It is no longer necessary to have cords or wires on the neck or body.

Mead Johnson & Co. **Booth Nos. 71 & 72**
Evansville, Indiana

The new Deca vitamin family for the vital first decade of life will be exhibited by Mead Johnson & Company in Booths 71 and 72. Included in the new Deca family of vitamin specialties are: Deca-Vi-Sol, for dropper dosage, a fruit flavored solution for infants and toddlers; Deca-Mulcin, for teaspoon dosage, a pleasantly-flavored liquid for preschool children of two to six years; and Deca-Vi-Caps, small, easily-swallowed capsules, for school-agers of six to ten years. All three Deca vitamin specialties supply 10 nutritionally significant vitamins including A. C. and D, plus 7 important B vitamins.

Medco Products Company **Booth No. 19**
Tulsa, Okla.

The MEDCOLATOR Stimulator, for the stimulation of innervated muscle or muscle groups ancillary to treatment by massage, is a low volt generator that will generate plenty of your interest. Electrical muscle stimulation is a valuable form of rehabilitation therapy. Be sure to visit our booth for a personal demonstration.

Medical Protective Co. **Booth No. 34**
Fort Wayne, Indiana

An unparalleled record of successfully fighting malpractice charges against doctors since 1899 distinguishes The Medical Protective Company from all others. Year in and year out 99.94 per cent of its policyholders have been completely covered under $2,500. Exclusive application to the professional liability field makes this unique record possible.

Meyer and Company **Booth No. 15**
St. Clair Shores, Michigan

Meyer and Company will demonstrate the new anticholinergic "Almethine," which when administered twice in a 24-hour period will decrease acid secretion in the peptic ulcer patient to such an extent that supplemental antacid therapy will exert its fullest effect.

Gastralme, the only antacid which buffers stomach acid at a neutral pH, will also be shown.

These two products offer the clinician the ultimate in ulcer management.

Michigan Bell Telephone Co. **Booth No. 60**
Detroit, Michigan

Our exhibit will consist of the following items of telephone equipment and service, which will be of special interest to physicians:

1. Automatic answering machine
2. Illuminated dial telephone
3. Full line of colored telephones
4. Speakerphone
5. Long distance credit cards
6. Volume control telephone

Michigan Medical Service **Booth No. 4**
Detroit, Michigan

You are cordially invited to visit our booth to obtain current information regarding Michigan Medical Service (Blue Shield). Our representative will gladly visit with you and answer any questions you may have with regard to your Blue Shield Plan.

Miller Surgical Co. **Booth No. 20**
Chicago, Illinois

MILLER SURGICAL COMPANY will show the Miller Electro-scalpel and accessories such as Snares, Suction Coagulation attachments, Suction Tubes, and Grasping Forceps. This is a cutting, coagulating, desiccating and fulgurating unit that may be used for all office surgical procedures as well as light major surgery of the eye, ear, nose, throat, vagina and rectum. A complete line of Diagnostic Equipment consisting of Illuminated Otoscopes, Ophthalmoscopes, Eyespud with Magnet, Transillumination Lamps, Headlites, Vaginal Speculums with Smoke Ejector and Gorsch Operating Scopes and Stainless Steel Proctoscopes, all sizes with magnification, will also be on display.

C. V. Mosby & Company **Booth No. 51**
St. Louis, Missouri

V. Mueller & Company **Booth No. 40**
Chicago, Illinois

Parke, Davis & Company **Booth No. 31**
Detroit, Michigan

Medical service members of our staff will be in attendance at our exhibit for consultation and discussion of various products. Important specialties such as Penicillin S-R, Benadryl, Ambodryl, Dilantin Suspension, Vitamins, Oxycel, Milontin, Amphedase,

Chloromycetin, Thrombin Topical, et cetera, will be featured. You are cordially invited to visit our exhibit.

Pfizer Laboratories **Booth No. 9**
Brooklyn, New York

The Pfizer exhibit again will be in the spotlight with its new and original concept of anti-stress, anti-infective therapy—TETRACYN S.F. and TERRAMYCIN S.F. (Stress Fortified). Also, the complete line of Pfizer antibiotics and STERAJECT as well as the new specialties, BONAMINE, TYZINE, TOCLASE and the complete line of steriod hormones including CORTRIL and the latest corticosteriod STERANE (brand of prednisolone).

Purdue Frederick Company **Booth No. 56**
New York, New York

The Purdue Frederick Company will feature:
SENOKOT—new, non-bulk, non-irritating constipation corrective acting selectively on the parasympathetic (Auerbach's) plexus in the large bowel, physiologically stimulating the neuromuscular defecatory reflex.
PRE-MENS—the multidimensional premenstrual tension therapy.
COLPOTAB—a tested effective Tyrothricin trichomonoacide.
CHLOROGIENE—a hygienic douche formulation will also be presented.

Randolph Surgical Supply Co. **Booth Nos. 12 & 13**
Detroit, Michigan

R. J. Reynolds Tobacco Co. **Booth No. 11**
Winston-Salem, N. C.

Welcome to the R. J. Reynolds Tobacco Company exhibit! You are cordially invited to receive a cigarette case (monogrammed with your initials) containing your choice of CAMEL, CAVALIER King Size, or WINSTON, the distinctive new king size filter cigarette.

A. H. Robins Co., Inc. **Booth No. 28**
Richmond, Virginia

Physicians attending the meeting of the Michigan Clinical Institute are extended a cordial invitation to visit the exhibit of the products of the A. H. Robins Company. Experienced medical representatives will be in attendance to welcome you and answer inquiries relative to any of Robins prescription specialties.

Ross Laboratories **Booth No. 24**
Columbus, Ohio

Ross Laboratories: Current concepts in infant feeding stress the critical aspects of preventive care. Visit our booth at your convenience; your Similac representative will be happy to discuss the physiologic role of Similac Powder and Similac Liquid in providing good growth, sound development and optimum clinical benefits. Reprints of current pediatric investigations and the latest Ross (M & R) Pediatric Research Conference Reports are available.

Sanborn Company **Booth No. 18**
Cambridge, Massachusetts

Featured at the Sanborn Company Booth No. 18 will be a continuous demonstration of the new Sanborn Viso-Scope, a 5-inch cathode ray oscilloscope, specially designed for use with the Sanborn direct-writing electrocardiographs, such as the famous Viso-Cardiette—as well as with more elaborate recording systems used in the research laboratory.
In addition, full information will be available on Sanborn systems, both direct-writing and photographic, for the recording of physiologic phenomena in from one to eight channels: on the new Sanborn Physiologic Pressure Transducer; and on the Vector System, Electronic Switch, and other new Sanborn transducers and supplementary instruments for cardiovascular diagnosis.

Sandoz Pharmaceuticals **Booth No. 16**
Hanover, N. J.

Sandoz Pharmaceuticals cordially invites you to visit our display at the Michigan Clinical Institute—Booth No. 16.
FIORINAL—A new approach to therapy of tension headaches and other head pain due to sinusitis and myalgia.
PLEXONAL—A new hypnotic—autonomic and central acting drug potentiates the action of subthreshold doses of classic sedative agents.
BELLADENAL—Anti-spasmodic sedative for the control of hypermotility with pain and hypersecretion of the intestinal tract.
Any of our representatives in attendance, will gladly answer questions about these and other Sandoz products.

W. B. Saunders Company **Booth No. 2**
Philadelphia, Pennsylvania

Among the most useful of 1956 books for the practicing physician are: Hinshaw and Garland: Diseases of the Chest; Current Therapy 1956; Sodeman: Pathologic Physiology, 2nd edition; Bland: Fluid Balance, 2nd edition; Laughlin: Neuroses; and Wolff: Electrocardiography, 2nd edition. These will be displayed along with our standards such as: Cecil-Loeb: Textbook of Medicine; Nelson: Pediatrics; Dorland: Dictionary; and the ever popular Medical, Surgical, and Pediatric Clinics of North America.

Schering Corporation **Booth No. 6**
Bloomfield, New Jersey

A cordial invitation is extended to the members of the Michigan State Medical Society to visit the Schering exhibit, Booth No. 6. The entire exhibit will be devoted to METICORTEN and METICORTELONE, the new corticosteroids for the treatment of rheumatoid arthritis, intractable asthma and other so-called collagen diseases. Extensive clinical and laboratory data demonstrating certain advantages of these new steroids over cortisone and hydrocortisone are shown.

G. D. Searle & Co. **Booth No.74**
Chicago, Illinois

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research. Featured will be Mictine, the new safe, non-mercurial oral diuretic; Vallaestril, the new svnthetic estrogen with exeremely low incident of side reactions; Banthine and Pro-Banthine, the standards in anticholinergic therapy; and Dramamine, for the prevention and treatment of motion sickness and other nauseas.

Sharp & Dohme, Inc. **Booth No. 21**
Philadelphia, Pa.

The Sharp & Dohme exhibit presents highlights on steroid therapy featuring "Deltra," "Hydeltra," and related adrenal cortical steroid preparations in endocrine disorders, collagen diseases, respiratory allergies, eye diseases and skin conditions. Expertly trained personnel will be pleased to discuss new dosage forms, new indications, and the latest summaries of advanced clinical reports in this field.

Smith, Kline & French Laboratories **Booth No. 17**
Philadelphia, Pennsylvania

The S.K.F. booth will feature the latest clinical information about THORAZINE® (chlorpromazine, S.K.F.) and its many varied uses in nausea, vomiting and hiccups; anxiety and tension states; alcoholism; intractable pain; behavior disorders in children; surgery and obstetrics; senile agitation; and the emotional stress associated with certain somatic conditions.

E. R. Squibb & Sons **Booth No. 44**
New York, N. Y.

E. R. Squibb & Sons has long been a leader in development of new agents used in prevention and development of disease. The results of diligent research is quickly made available to the Medical Profession as new products or improvement on products already marketed.
At Booth No. 44, we are pleased to present up-to-date information on these advances for your consideration.

The Stuart Company **Booth No. 14**
Pasadena, California

All physicians attending the meeting are cordially invited to visit the Stuart exhibit. You will find Stuart salesmen very willing to talk over or answer any questions pertaining to the Stuart line.

Testagar & Co., Inc. **Booth No. 23**
Detroit, Michigan

TESTAGAR & CO., INC. will show three new timed disintegrating capsules. TIMED PYMADEX is a trisynergistic antihistamine in a timed disintegrating capsule composed of three proven anthistamines. Smaller than average doses of each are used, thereby minimizing possible side reactions to the patient and still affording the patient a maximum of effect. TIMED PYMADEX CAPSULES, a daytime partner to Timed Pyma Capsules also contains 6 mg. of Dextro-Amphetamine to overcome any possible soporific after-effects of the antihistamines and give the patient a sense of well being. One TIMED PYMADEX CAPSULE at breakfast and one TIMED PYMA CAPSULE before retiring affords the patient protection around the clock. TIMED BARTROPIN CAPSULES are an antispasmodic capsule using tried and proven Atropine. One capsule at breakfast affords ten to twelve hours' (all day) antispasmodic activity. Samples and literature will be available.

S. J. Tutag & Company **Booth No. 39**
Detroit, Michigan

At the S. J. Tutab & Company exhibit, will be featured Asminorel. This tablet provides both instant and prolonged relief in asthmatic conditions in the single dosage form.
The outer layer affords prompt relief through sublingual absorption. After ninety seconds the Nucleus is swallowed, giving prolonged relief for four hours.

The Upjohn Company **Booth No. 50**
Kalamazoo, Michigan

Members of the medical profession are invited to visit the Upjohn booth where members of The Upjohn Company professional detail staff are prepared to discuss subjects of mutual interest.

U. S. Vitamin Corporation **Booth No. 49**
New York, N. Y.

Our exhibit will feature C.V.P., a water-soluble, more active citrus flavonoid compound (vitamin P complex) potentiated by vitamin C. C.V.P. has been found to be highly effective clinically . . . proved by more than 2,000 cases thus far reported . . . in increasing capillary resistance and checking bleeding due to capillary fragility in hypertension, diabetes, purpura, uterine bleeding, post-surgical bleeding and other hemorrhagic conditions. It has also been found valuable in controlling symptoms and reducing fever in the common cold, influenza, pharyngitis, tonsillitis and certain respiratory infections.
Professional samples and literature on C.V.P. and other of our nutritional specialties will be distributed at our booth.

Wayne University College of Medicine Alumni **Booth No. 47**
Detroit, Michigan

A scientific exhibit prepared at the Wayne University College of Medicine as a result of basic and clinical research performed at Detroit Receiving Hospital and Grace Hospital. In addition, photographs and descriptions of the Detroit Medical Center, including the campus of the Wayne University College of Medicine, will be featured.

West Disinfecting Company **Booth No. 41**
Detroit, Michigan

WESCODYNE, the original "tamed iodine" non-selective germicide accepted for hospital use.
WESCODYNE at dilutions of 3 oz. per 5 gallons of water (75 ppm available iodine) will kill the following micro-organisms within three to five minutes: Poliomyelitis viruses, Tubercle Bacillus, Fungi, Bacteria and Spores. At recommended dilutions the cost is only 2c per gallon.
WESCODYNE eliminates the typical "obnoxious" hospital odor.

Woodward Medical Personnel Bureau **Booth No. 53**
Chicago, Illinois

In Booth No. 53, Mrs. Ann Woodward offers the facilities of the Woodward Medical Personnel Bureau, an organization now in its fifty-ninth year, serving as counsellors in medical personnel problems, hospitals and institutions and public health and welfare organizations. Recommendations can be made of Diplomates of the American Boards, physicians trained in the specialties, Administrators, Public Health specialists, Executive, Supervising and Industrial Nurses, Medical and X-ray Technologists, Therapists, Scientists, Medical Librarians, Social Works, and other professional and auxiliary personnel. Professional personnel professionally selected. A service international in scope.

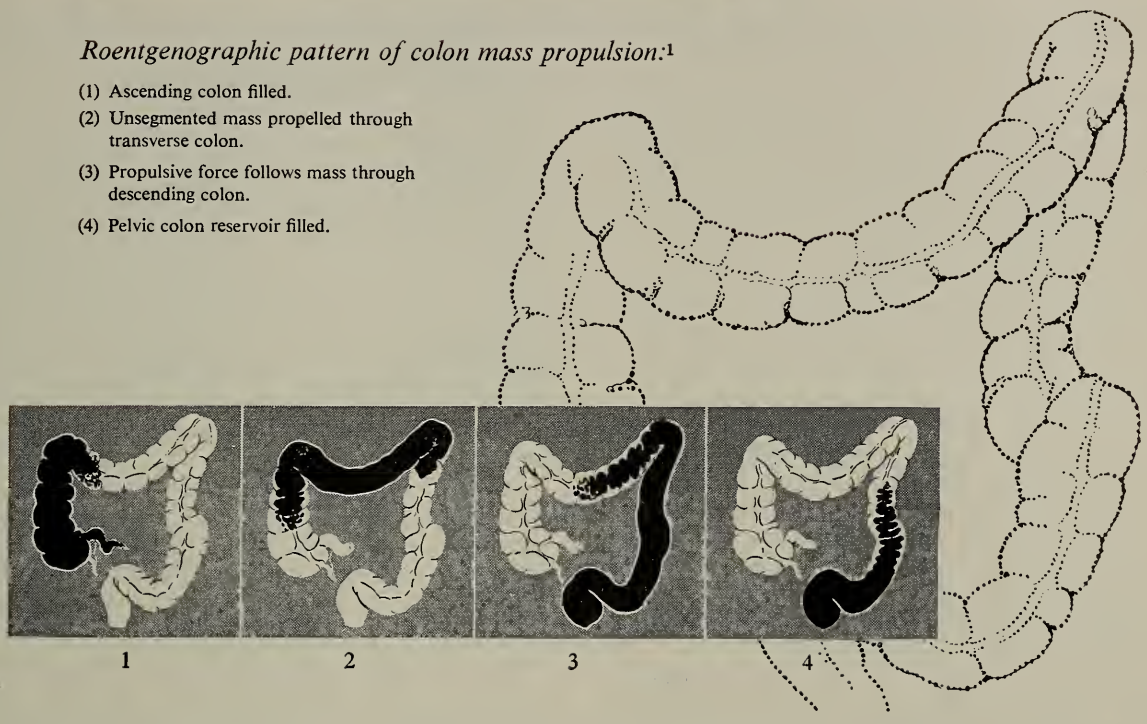
Zimmer Manufacturing Company **Booth No. 27**
Toledo, Ohio

Mr. C. A. Fisher, your Zimmer Distributor, extends a most cordial invitation to the members of the Michigan State Medical Society to visit his exhibit at Booth No. 27.
A complete line of Orthopedic Instruments and Fracture Equipment will be on display. Items of special interest, BADGLEY NAIL, TITANIUM and ZIMALOY implants, TOWNLEY CUP STEM PROSTHESIS, SCHNEIDER SELF-BROACHING INTRAMEDULLARY PINS, "UNDERWRITERS APPROVED" EXPLOSION PROOF LUCK BONE SAW and BROWN-ELECTRO DERMATONE.
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SMOOTHAGE ACTION IN CONSTIPATION

Roentgenographic pattern of colon mass propulsion:[1]

(1) Ascending colon filled.
(2) Unsegmented mass propelled through transverse colon.
(3) Propulsive force follows mass through descending colon.
(4) Pelvic colon reservoir filled.



Reestablishing Bowel Reflexes with Metamucil®

Nervous fatigue, tension, injudicious diet, failure to establish regularity, too little exercise, excessive use of cathartics—all factors which contribute to constipation.[2]

Sufficient bulk and sufficient fluid form the basic rationale of treatment of constipation. Metamucil (the mucilloid of Plantago ovata) produces a bland, smooth bulk when mixed with the intestinal contents. This bulk, through its mass alone, stimulates the peristaltic reflex and thus initiates the desire to evacuate, even in patients in whom postoperative hesitancy exists.

Correction of constipation logically, therefore, lies in the suitable adjustment of such factors as nervous fatigue and tension, improper intake of fluid, improper dietary habits, failure to respond to the call to stool, lack of physical exercise and abuse of the intestinal tract through excessive use of laxatives.[2]

The characteristics of Metamucil permit the correction of most of these factors: it provides bulk; it demands adequate intake of fluids (one glass with Metamucil powder, one glass after each dose); it increases the physiologic demand to evacuate; and it does not establish a laxative "habit." Metamucil, in addition, is inert, and also nonirritating and nonallergenic.

The average adult dose is one rounded teaspoonful of Metamucil powder in a glass of cool water, milk or fruit juice, followed by an additional glass of fluid if indicated.

Metamucil is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent. It is supplied in containers of one pound—also four ounces and eight ounces. G. D. Searle & Co., Research in the Service of Medicine.

1. Best, C. H., and Taylor, N.B.: The Physiological Basis of Medical Practice: A Text in Applied Physiology, ed. 5, Baltimore, The Williams & Wilkins Company, 1950, pp. 579-583.
2. Bargen, J. A.: A Method of Improving Function of the Bowel, Gastroenterology *13*:275 (Oct.) 1949.

SEARLE

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

RHEUMATIC FEVER PREVENTION PROGRAM

Effective January 1, 1956, the Michigan Crippled Children Commission and the Michigan Department of Health undertook a program of prophylaxis for the prevention of streptococcal infections and rheumatic recurrences in rheumatic patients.

Continuous year-around administration of sulfonamide, oral penicillin or benzathine penicillin G is recommended by the Council on Rheumatic Fever of the American Heart Association for all patients who have had one or more attacks of rheumatic fever or who show clinical evidence of rheumatic heart disease. Of the three methods of drug therapy, the monthly intramuscular administration of benzathine penicillin G is considered to have advantages in that intramuscular injection guarantees that the patient is actually receiving the medication; it tends to maintain a more stable blood-level of penicillin and it requires a monthly visit to the doctor's office thereby affording an opportuninty for closer supervision and better follow-up.

In the light of these facts, the Michigan Department of Health, with the concurrence of the Rheumatic Fever Control Committee of the Michigan State Medical Society, on January 1, began distributing to physicians of Michigan benzathine penicillin G for administration at monthly intervals to patients who have had one or more attacks of rheumatic fever or who show evidence of rheumatic heart disease. The drug will be packaged in sets of four disposable syringes (a four-month supply) in two dosages: 600,000 units for small children and 1,200,000 units for larger children and adults. Distribution will be through the regular channels already being used for biologics distributed by the Michigan Department of Health.

The physician will certify to the diagnosis on a form (Form C 62A) supplied by the Michigan Department of Health before obtaining a supply of the drug and make a progress report at four-month intervals when he obtains additional benzathine penicillin G. The progress report will indicate the date of each injection; whether or not a recurrence has occurred; and the extent and duration of discomfort at the site of injection.

If there is doubt as to the correct diagnosis, it is recommended that the patient be referred to a consultant, or that the diagnostic and consultation facilities of the several MSMS Rheumatic Fever Centers or the facilities of the large metropolitan hospitals be used to confirm or deny the presence of the rheumatic state.

It is recommended that throat cultures for Group A Beta Hemolytic Streptococcus be taken before the first injection is given and that if the culture is returned positive, the culture be repeated at intervals until negative.

It is also recommended that patients always be warned ahead of time of the possibility or even probability of pain in the injected area for one or more days following the injection.

The Michigan Crippled Children Commission, through the use of trust funds, will provide payment for the administration of the benzathine penicillin G to any child (under twenty-one years) with a history of previous attacks of rheumatic fever or who shows evidence of rheumatic heart disease who now has, or has had a crippled or afflicted children's court order. Details of procedures to be followed may be secured from any representative of the Commission.

EXAMINATION FOR ENTEROPATHOGENIC E. COLI

Procedures for the isolation and identification of Enteropathogenic strains of *E. coli* are now available in the Diagnostic Laboratories of the Michigan Department of Health. Specimens from cases of diarrhea in infants and children suspected of infection with these organisms may be submitted to the Laboratories in Lansing, Grand Rapids, Houghton, or Powers. The blank accompanying the specimen should indicate that examination for Enteropathogenic *E. coli* is desired. Standard containers for feces specimens may be used for the submission of specimens.

CONFERENCE ON THE CHILD AND THE HOSPITAL

A Conference on the Child and the Hospital will be sponsored by the Michigan Department of Health and the University of Michigan School of Nursing at the Rackham Building, Ann Arbor, April 24 and 25, 1956.

The objectives of the Conference are:

1. To understand better the feelings of the child and his family in the hospital.
2. To improve the atmosphere or emotional environment of care of the hospitalized child.
3. To improve the care of the child in the hospital.

Applications will be accepted from hospital administrators, directors of nursing, pediatric supervisors and head nurses, pediatric instructors and public health nursing supervisors, up to a limit of 125.

Applications may be made to the Maternal and Child Health Section, Michigan Department of Health, Lansing 4, Michigan.

An unexplained mediastinal density on x-ray examination should be viewed with a high degree of suspicion.

* * *

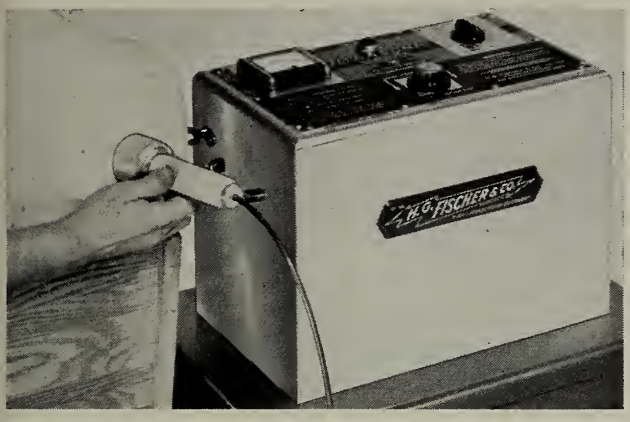
Wilms' tumors account for about 20 per cent of all malignant diseases in childhood.

* * *

The foremost unsolved problem of cancer control is to find how to kill cancer cells which are scattered widely, and therefore cannot be removed by surgery or destroyed by radiation.

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5. Easy-to-Read Meter Accurately Shows Amount of Ultrasound the Patient is Receiving
6. Extra Large Active Crystal Surface of 10 Square Centimeters
7. Output of 3 Watts per Square Centimeter—30 Watts Total
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. NEWS MEDICAL

MICHIGAN AUTHORS

Willard D. Mayer, M.D., and **Max R. Beitman, M.D.,** Detroit, are the authors of an article entitled "Trichiniasis," published in THE JOURNAL of the Michigan State Medical Society, June, 1954, a condensation of which appears in *American Practitioner and Digest of Treatment,* December, 1955.

William S. Reveno, M.D., Lawrence Reynolds, M.D., and **Forest D. Dodrill, M.D.,** Detroit, are the authors of an article entitled "Occlusion of Both Innominate Veins, Restoration of Blood Flow by Arterial Graft," published in *The Journal of the American Medical Association,* November 19, 1955.

James A. Devlin, M.D., B. Ch., M.S., Harold E. Bowman, M.D., C. Leslie Mitchell, M.D., Detroit, are the authors of an article entitled "Non-Osteogenic Fibroma of Bone," published in the *Journal of Bone and Joint Surgery,* June, 1955, and condensed in the *American Practitioner and Digest of Treatment,* November, 1955.

W. H. Steffensen, M.D., Grand Rapids, is the author of an article entitled "The Technic of Administration of a Local Anesthetic for Repair of Cleft Lip in Infants," published in the *Journal of the International College of Surgeons,* October, 1955.

An editorial entitled "Titles and Definitions" which was published in THE JOURNAL of the Michigan State Medical Society, July, 1955, has been reprinted in the *Delaware State Medical Journal,* October, 1955.

A. D. Ruedemann, M.D., Detroit, is the author of an article entitled "Glandular Type Exophthalmos," published in the *Digest of Ophthalmology and Otolaryngology,* November, 1955.

John N. Wolfe, M.D., James E. Lofstrom, M.D., and **Samuel L. Balofsky, M.D.,** Detroit, are the authors of an article entitled "Radiation Therapy of Carcinoma of the Cervix, Some Aspects of Cobalt 60 Teletherapy," published in *Wayne University College of Medicine Bulletin,* Volume 2, Number 3.

O. A. Brines, M.D., Detroit, is the author of an article entitled "History of Receiving Hospital," published in *Wayne University College of Medicine Bulletin,* Volume 2, Number 3.

Louis W. Lewis, M.D., Ann Arbor, is the author of an article entitled "Evaluation of Sympathetic Activity following Chemical or Surgical Sympathectomy," presented before the Twenty-Ninth Congress of Anesthetists in Los Angeles, California, October, 1954, and published in *Current Researches in Anesthesia and Analgesia,* November-December, 1955.

E. S. Gurjian, M.D., F.A.C.S., J. E. Webster, M.D., F.A.C.S., and **H. R. Lissner,** Detroit, are the authors of an article entitled "Observations on the Mechanism of Brain Concussion, Contusion, and Laceration," published in *Surgery, Gynecology and Obstetrics,* December, 1955.

Gerald P. Hodge, B.F.A., Ann Arbor, is the author of an article entitled "The Profession of Medical Illustration," published in the *University of Michigan Medical Bulletin,* October, 1955.

Mary Lou Cummings, Ann Arbor, is the author of an article entitled "The Development of Medical Art," published in the *University of Michigan Medical Bulletin,* October, 1955. Miss Cummings is the daughter of Howard H. Cummings, M.D., Past President of the Michigan State Medical Society.

William S. McNary, Detroit, is the author of an article entitled "Don't Fence the Community Out," published in *Hospitals,* December, 1955. This article was presented to the Mid-West Hospital Association meeting in Kansas City, April, 1955.

J. Edward Berk, M.D., Sc.D., Detroit, is the author of an article entitled "Medical Aspects of Noncalculous Gallbladder Disease," read as part of the Panel Discussion on "Twenty-five Years' Observation of the Gallbladder Controversy," before the First Annual Convention of the American College of Gastroenterology, Washington, D. C., October, 1954, and published in the *American Journal of Gastroenterology,* November, 1955.

Lawrence Reynolds, M.D., and **Harold Fulton, M.D.,** Detroit, are the authors of an article entitled "Oral Cholecystography with Iopanoic Acid (Telepaque)," read before the Section on Radiology at the 104th Annual Meeting of the American Medical Association, Atlantic City, June, 1955, and published in *The Journal of the American Medical Association,* December 3, 1955.

Hermann Pinkus, M.D., Monroe, is the author of an article entitled "Paul Ehrlich and His Impact on Dermatology," published in the AMA *Archives of Dermatology,* August, 1955.

C. Howard Ross, M.D., Ann Arbor, is the author of an article entitled "Infant Care and Feeding," published in *The Journal of the Student AMA,* December, 1955.

Kenneth B. Babcock, M.D., now of Chicago, formerly of Detroit, is the author of an article entitled "The Joint Commission on Accreditation of Hospitals," published in *The Journal of the Student AMA,* December, 1955.

Harold E. Bowman, M.D., Grand Rapids, and **Hermann Pinkus, M.D.,** Detroit, are the authors of an article entitled "Keratoacanthoma (Molluscum Sebaceum)," published in AMA *Archives of Pathology,* July, 1955.

Hermann Pinkus, M.D., Detroit, is the author of an article entitled "Anatomy of the Skin 1953," published in the *International Journal of Dermatology,* Volume 110, Number 1 (1955).

Richard J. Ferrara, M.D., Detroit, and **Hermann Pinkus, M.D.**, Monroe, are the authors of an article entitled "Alseroxylon in the Treatment of Pruritic and Psychogenic Dermatoses," published in AMA *Archives of Dermatology,* July, 1955.

Coleman Mopper, M.D., Hermann Pinkus, M.D., and **Peter Lacobell, M.D.**, Detroit, are the authors of an article entitled "Multiple Sweat Gland Abscesses of Infants" published in AMA *Archives of Dermatology,* February, 1955.

G. C. Brown, Ann Arbor, is the author of an article entitled "Virus Excretion and Antibody Response in Clinical and Subclinical Cases of Poliomyelitis," published in *Annals of the New York Academy of Sciences,* September 27, 1955.

T. Francis, Jr., M.D., Ann Arbor, is the author of an article entitled "Summary and Review of Poliomyelitis Immunization," published in *Annals of the New York Academy of Sciences,* September 27, 1955.

Edward F. Sladek, M.D., Traverse City, is the original author of an article which appeared in *American Journal of Surgery,* November, 1955. Dr. Sladek reports on a series of 300 infants between the ages of three days and twelve years, who were treated surgically for anal fissure.

* * *

Research on heart disease relative to its cause and prevention should be undertaken on international lines under the auspices of the World Health Organization (WHO) according to recommendations made by the WHO Study Group on Atherosclerosis which met in November in Geneva, under the chairmanship of Herman Hilleboe, M.D., New York State Commissioner of Health, "because of its paramount importance as a public health problem."

The most clearly recognized types of ischemic heart disease are myocardial infarction due to coronary obstruction (angina pectoris).

There is as yet no clear or scientific evidence to show that any particular factor causes this disease or contributes to its development. Quite a number of factors are probably at work simultaneously.

Striking and challenging differences are observed from one country to another. In the USA, UK and Sweden, many more men than women die from ischemic heart disease between the ages of forty and sixty, but, in the Netherlands, female mortality is higher.

Populations on low fat diets appear to suffer a relatively low incidence of atherosclerosis and ischemic heart disease. In Europe, during the war, the reduction of fat consumption was parallelled by a lowering of mortality from heart disease.

Occupation and social status may also be factors; professional and business men suffer from ischemic heart disease more frequently and more severely than people in more active jobs.

* * *

The University of Florida Midwinter Seminar in Ophthalmology and Otolaryngology was held at Miami Beach, Florida, from January 16 to 21, 1956. A. D. Ruedemann, M.D., Detroit, took an active part, present-



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The applicator, with its very flexible connecting cable, has been designed for convenient application to various parts of the human body. Approved—F.C.C. No. U-101, Underwriters' Laboratories.

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ing three papers: (1) "Glandular Exophthalmos Differential Diagnosis and Treatment," (2) "The Cosmetic End Result of Enucleation with and without the Use of the Implant," and (3) "The Use of Irradiation Therapy in Ophthalmology with Special Reference to Gamma in Treatment of Cancer of the Lids and Beta in Treatment of Corneal Lesions."

* * *

The Bulletin of the Sarasota County Medical Society, Sarasota, Florida, for November, 1955, recently received, is a beautifully executed 64-page volume covered with a heavy glossy paper, devoted primarily to the new 147-bed Sarasota County hospital, which has five floors, is built of welded steel, cast cement and is completely air-conditioned. There are thirty-one half-page pictures and one two-page center spread.

A page each is devoted to reproductions of letters from the Governor, the AMA General Secretary, the Florida Medical Association, and each U. S. Senator from Florida.

Don Laurent, the administrator, who is from Cadillac, Michigan, gets two half pages. He received training at Wexford County Normal and at Michigan State. Graduation brought a BS degree in medical biology and he accepted a job with the Michigan State Health Department, where he developed a method for simple pasteurization of milk. He was a Fellow of the Commonwealth Foundation of Massachusetts, and returned to Michigan State College for his Ph.D.

* * *

Medical Horizons.—In co-operation with the American Medical Association, Ciba Pharmaceutical Products, Inc., is producing a series of television programs. The outlet in Michigan is WXYZ-TV at 9:30 P.M. The program for December 12, 1955, was from the Kresge Medical Research Building at the Institute of Industrial Health, University of Michigan, Ann Arbor, was devoted to medical problems related to industry—the Effect of Noise on Hearing. Shown were the effects of various industrial noises on different individuals over a period of years and how to avoid them. Tests were explained which are now being developed to channel people into occupations compatible with their hearing.

The December 19 program was from New York Hospital, Cornell Medical Center, and dealt with Four Functions of the Hospital Nurse.

The December 26 program was from the Willard Parker Hospital, Bellevue Medical Center, concerning the Fight Against Communicable Disease.

Liver Disease, and the Function of Infectious Hepatitis was the program at Jersey City Medical Center, January 2, 1956.

The January 9 program from the University of Colorado School of Medicine, Denver, concerned The Emotional Makeup of the Individual prone to Automobile Accidents.

* * *

The Frederick A. Coller Surgical Society held its first clinical conference October 27, 28, 29, 1955, in Ann Arbor. An outstanding program was presented, featuring the newest research in surgery. Cocktails, dinner, recep-



tion, lunch, brunch and the Michigan-Iowa homecoming game occupied three days.

Officers are: President—Allen Boyden, M.D.; Secretary-Treasurer—Thurston Thieme; Three-year Councillors—Robert Patton, M.D., Kenneth Maclean, M.D., Donald Cooper, M.D.; Two-year Councillors—John Wellman, M.D., Clifford Keane, M.D., Richard Lillie, M.D.; One-year Councillors—Darrell Campbell, M.D., Chester McVay, M.D.

Announcement has been made of the nomination of Dr. Coller as an Honorary Fellow of the Royal College of Surgeons of England, an honor which is held by only some fifty people throughout the world. The embossed scroll commemorating the award was presented to Dr. Coller during the recent meeting of the American College of Surgeons in Chicago.

* * *

The Gill Memorial Eye, Ear and Throat Hospital at Roanoke, Virginia, announces the 29th Annual Institute or Conference to be held April 2 to 7, 1956. Two Michigan men are listed on the faculty: Jack S. Guyton, M.D., Detroit, and John E. Magielski, M.D., Ann Arbor.

Quite a number of Michigan men have appeared on previous programs: Ferris Smith, M.D., Grand Rapids; A. C. Furstenberg, M.D., Ann Arbor; Clair S. Straith, M.D., Detroit; J. H. Maxwell, M.D., Ann Arbor, who has appeared twice; A. D. Ruedemann, M.D., Detroit, who has appeared five times; Bruce Fralick, M.D., Ann Arbor; Harold F. Falls, M.D., Ann Arbor, appearing twice; Russell N. DeLong, M.D., Ann Arbor; Jerome W. Conn, M.D., Ann Arbor; H. Saul Samuel Sugar, M. D., Detroit; Richard Schneider, M.D., Ann Arbor; and John Sheldon, M.D., Ann Arbor.

* * *

The Michigan Academy of General Practice will hold its third Symposium on Office Procedures at the Pantlind Hotel, Grand Rapids, April 4, 1956. Guest speakers will cover both diagnostic and therapeutic procedures usable in the office. Five category L credit hours will be granted. Three forty-five minute papers begin at 10 a.m. followed by panel discussion. Complimentary luncheon. Two forty-five-minute papers in the afternoon, also followed by panel discussion. Cocktail reception and hot hors d'oeuvres. Lederle Laboratories co-sponsor.

* * *

The Bulletin of the Los Angeles County Medical Association for December, 1955, carries an article with several illustrations of the honor bestowed on the Los Angeles County Medical Society by the Michigan State Medical Society for pioneering in the medical television field with the great TV show, "Medic." Mr. Hugh W. Brenneman, public relations counsel of the Michigan State Medical Society, presented a plaque to Dr. Ewing L. Turner, LACMA President, who accepted on behalf of the Association.

The plaque cited the LACMA for its sponsorship of and technical assistance in the highly successful television show and commended the Association for "outstanding service to both the American public and the medical profession."

The Editorial entitled "Psychiatrists are M.D.'s Too," prepared by the Committee on Mental Health of the Michigan State Medical Society, and recently published in our JOURNAL, is republished in the *West Virginia Medical Journal,* December, 1955.

* * *

Rheumatic Fever Recurrence.—A program for prevention of recurrence of rheumatic fever has been worked out by the Rheumatic Fever Control Committee of the Michigan State Medical Society, the State Department of Health and the Crippled Children's Commission, and approved by the Council of the Michigan State Medical Society. Following are their announcements:

Your Rheumatic Fever Control Committee and Michigan State Medical Society Council have concurred in recommending rheumatic fever prophylaxis using benzathine penicillin G. (Bicillin) as a preferred measure. The Michigan Department of Health and the Michigan Crippled Children Commission are implementing this program, the former making available the benzathine penicillin G, and the latter making payment to the physician for the administration of the drug in the physician's office for children under twenty-one years with a history of previous attacks of rheumatic fever or evidence of rheumatic heart disease who have or have had a Crippled or Afflicted Children's Court Order.

The Michigan Crippled Children Commission will contact the physician of record in its office to ascertain the physician's desire to institute prophylaxis with monthly injections of benzathine penicillin G, and if he so desires the patient's family will be contacted. When the family has indicated its willingness to carry out the prophylactic treatment the family physician may obtain the medication from the local health department and submit his statement for professional services in its administration to the Michigan Crippled Children Commission on forms which will be provided.

The program becomes effective January 16, 1956, and the local health departments are expected to be stocked with benzathine penicillin G by the time the physician and patient's family have indicated their views in the matter. The Michigan Crippled Children Commission files are being reviewed county by county and physicians will not be contacted simultaneously. The program will not initially apply in counties in which a program of prophylaxis is already in progress as another project.

Should any physician desire to institute prophylaxis under the above program for patients who have had a Michigan Crippled Children Commission Court Order since January 1, 1954, he may write the Medical Coordinator, Rheumatic Fever Program, Michigan Crippled Children Commission, 252 Hollister Building, Lansing 4, Michigan, for authorization in advance of his being notified by the Commission. The patient's name, diagnosis, name of parents, the county of residence, and assurance that the parents of the child will co-operate should be stated in the letter so that prompt reply can be made.

* * *

The E. I. DuPont de Nemours Company has recently announced its grants of more than $900,000 to more

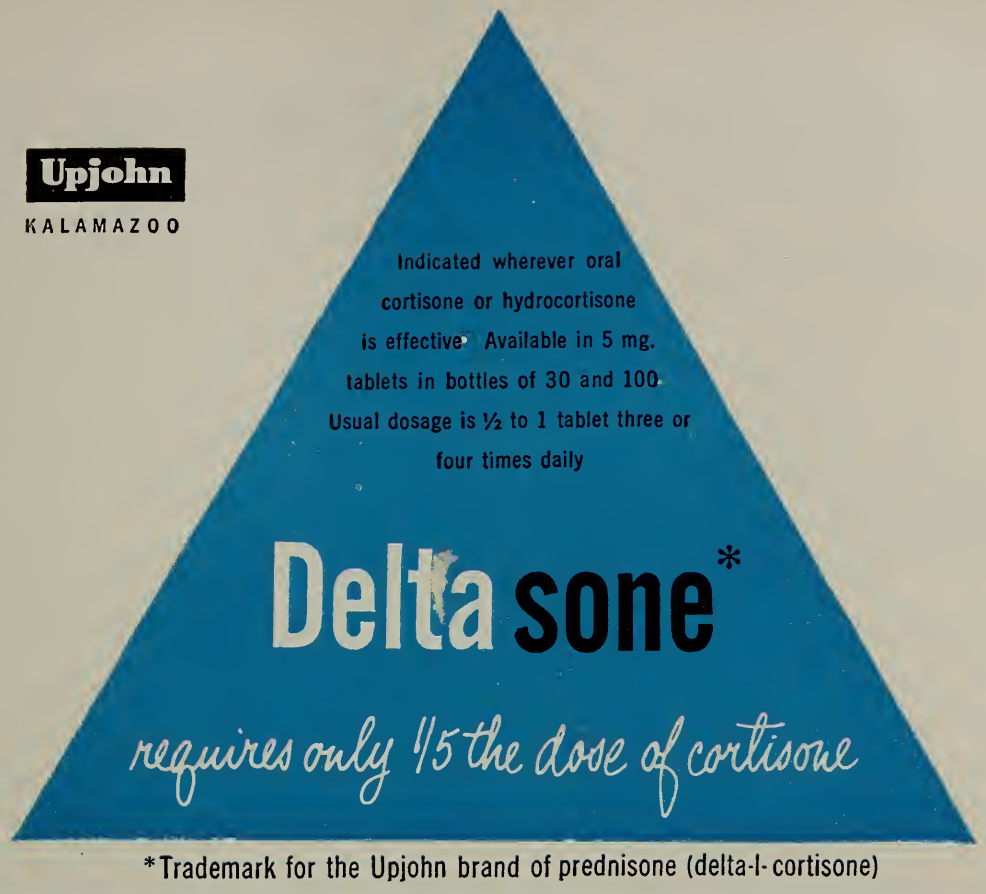
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than 100 colleges and universities as part of its annual program for the improvement of teaching in support of scientific studies. The funds are to be used largely for teaching fellowships, and particularly for students who have completed two years of part-time teaching.

* * *

The American Congress of Physical Medicine and Rehabilitation will hold its thirty-fourth annual scientific and clinical session September 9-14, 1956, inclusive, at The Ambassador, Atlantic City, N. J.

Scientific and clinical sessions will be given September 10, 11, 12, 13, and 14. All sessions will be open to members of the medical profession in good standing with the American Medical Association. In addition to the scientific sessions, annual instruction seminars will be held. Full information may be obtained by writing to the executive secretary.

To stimulate interest in the field of physical medicine and rehabilitation, the American Congress of Physical Medicine and Rehabilitation will award annually a prize for an essay on any subject relating to physical medicine and rehabilitation. The contest, while open to anyone, is primarily directed to medical students, interns, residents, graduate students in the pre-clinical sciences and graduate students in physical medicine and rehabilitation.

Manuscripts *must be* in the office of the American Congress of Physical Medicine and Rehabilitation, 30 N. Michigan Ave., Chicago 2, not later than June 1, 1956.

Albert E. Heustis, M.D., Commissioner of the Michigan State Department of Health, in conference with the Executive Committee of the Council, M.S.M.S., December 14, 1956, reported that 90 per cent of the children eligible for the first rounds of Salk polio vaccine had received at least one shot. Of these, only seven developed paralytic polio even though they had only one shot. Of the 10 per cent who did not have any shot, twenty developed paralyzing polio—a very certain commentary on its effectiveness.

The Department has received and distributed about 5,450,000 doses and needs about 8 million altogether for the program.

Dr. Heustis cautioned that some of the material may soon reach the expiration date. Before that time, the supplies should be returned for replacement in order to have no wastage. The supplies thus recovered can still be used immediately instead of standing on the doctors' shelves. If any of our doctors have supplies, they are requested to check them to avoid wastage.

* * *

The Ford Foundation, December 16, 1955, made the most astounding announcement in news circles for years. A grant of half a billion dollars for improving medical training and hospital services was the biggest gift in the history of philanthropy. Colleges and universities were given $210,000,000. Three thousand, five hundred privately operated hospitals will divide $200,000,000. The sum of $90,000,000 is going to privately owned medical

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schools. The money will be given according to certain formula, and over a short period of time. The Ford Foundation owns a large block of the stock of the Ford Motor Company, and while using monies available, is selling some of its stock. The Foundation for years has made grants for various purposes but never before in the field of medicine.

The American Medical Association, for several years, has sponsored gifts from alumni and friends to the eighty-one approved medical schools to help them during financial stringency. Over five millions of dollars have thus come to the medical schools, but the need has been estimated at about ten million a year. Our private individual attempts have been far short of needs. This gift should help its recipients no end.

The Ford Foundation has also made grants totalling $6,500,000 in support of educational television. The largest of three grants was $6,263,340 for educational television; $90,500 went to the television and radio center at Ann Arbor, Michigan; $140,000 went to the council which has headquarters in Washington, D. C., for operating expenses in 1956.

* * *

The following members of the Michigan State Medical Society were granted Fellowship and Associate Fellowship certificates in postgraduate medical education during the year:

Fellowship.—Walter F. Bach, M.D., Dearborn; Lawrence A. Berg, M.D., Sturgis; Sidney E. Chapin, M.D., Dearborn; Henry E. Cope, M.D., Lansing; John D. DeMay, M.D., Jackson; Paul L. DeWaele, M.D., Bay City; Roscoe J. Fortner, M.D., Three Rivers; Lawrence E. Grate, Charlevoix; Robert M. Griffith, M.D., Muskegon; Cyril F. Hanft, M.D., Springport; James W. Hawkins, M.D., Detroit; William B. Kerr, M.D., Saginaw; James M. LaBerge, M.D., Wyandotte; Jackson E. Livesay, M.D., Flint; Dwight J. Mosier, M.D., Bay City; Edward L. Robb, M.D., Detroit; William A. Sautter, M.D., Horton; Laurence F. Segar, M.D., Detroit; Eugene M. Shafarman, M.D., Detroit; Charles J. Socall, M.D., Detroit 11; Ethon L. Stone, M.D., Jackson; Homer H. Stryker, M.D., Kalamazoo; Ross V. Taylor, M.D., Jackson; Frederick I. Van Wagnen, M.D., Jackson; William H. Wacek, M.D., Ironwood; Darwin E. Wagoner, M.D., Lincoln; James W. Wilcox, M.D., Bay City.

Associate Fellowship.—Arnold O. Abraham, M.D., Hudson; Francis C. Anderson, M.D., Escanaba; Hal G. Aulie, M.D., Royal Oak; George E. R. Anthony, M.D., Flint; Clarence L. Becklein, M.D., Detroit; Alexander W. Blain, III, M.D., Detroit; Park S. Bradshaw, M.D., Muskegon; Herman R. Brukardt, M.D., Menominee; Harry J. Burkholder, M.D., Alpena; James G. Christopher, M.D., Detroit; Mario S. Cioffari, M.D., Detroit 35; Claire H. Clausen, M.D., Sault Ste. Marie; John F. Cotant, M.D., Detroit; Edward F. Crippen, M.D., Mancelona; Harry M. Dickman, M.D., Hudson; Gerald A. Drake, M.D., Petoskey; Stanley C.

Say you saw it in the Journal of the Michigan State Medical Society

Fenton, M.D., Detroit; Glendon B. Goddard, M.D., Pickford; Herbert W. Harris, M.D., Lansing; Mildred L. Herkner, M.D., Traverse City; Donald C. Howe, Jr., M.D., Sault Ste. Marie; LeRoy W. Hull, M.D., Detroit; Morris Kazdan, M.D., Detroit; Victor E. Lepisto, M.D., Laurium; Alton B. Marsh, M.D., Detroit; Edgar W. Moreland, M.D., Milan; Archie S. Narotzky, M.D., Ishpeming; Emil F. Rupprecht, M.D., Detroit 4; Leland L. Swenson, M.D., Muskegon; Karl L. Swift, M.D., Detroit 2; Henry A. Tressel, M.D., Wakefield; William C. Van Gelder, M.D., Muskegon; Roger V. Walker, M.D., Detroit; John E. Webster, M.D., Detroit 26; Warren G. White, Jr., M.D., Muskegon; Henry J. Winkler, M.D., L'Anse; Winston R. Wreggit, M.D., Detroit; Arthur R. Young, M.D., Pontiac.

* * *

The Michael Reese Hospital offers a course in Electrocardiographic Interpretation for graduate physicians. The course will be given at the Michael Reese Hospital, Chicago, by Louis N. Katz, M.D., Director of the Cardiovascular Department, Medical Research Institute, on Wednesdays from 7:00 to 9:00 p.m. for twelve weeks, beginning February 8. For information, write Mrs. Ana Rose, Administrative Secretary, Cardiovascular Department, Michael Reese Hospital, Chicago 16, Illinois.

* * *

The American Academy of Neurology offers a course for general practitioners in Common Neurological Disorders, St. Louis, Missouri, to be given April 25, 1956. In addition, the Academy presents advance one-day courses on neuropathology, infectious diseases in neurology, neurophysiology, neurochemistry, clinical electroencephalography and electromyography, convulsive disorders, neurologic disorders of infancy and childhood, injuries to the nervous system and current advances in neurology.

The course for general practitioners has received recognition by the American Academy of General Practice and members participating will gain six hours' credit in Category II.

For information, write Mrs. J. C. McKinley, Executive Secretary, 3501 E. 54th Street, Minneapolis 17, Minn.

* * *

The American College of Allergists announces its Twelfth Annual Meeting and Graduate Instructional Course for the Hotel New Yorker, New York City. The Graduate Instructional Course is scheduled for April 15-16-17, 1956, and the Annual Meeting for April 18-19-20, 1956.

* * *

The Tenth Inter-American Congress of the Pan-American Medical Association will be held in Mexico City, April 15-21, 1957. Four days will be devoted to scientific sessions, beginning at 9 a.m., and three days in sightseeing, with visits to Cuernavaca, Taxco and Acapulco. Monday and Tuesday of the following week, medical meetings will be held in Guatemala City.

For information, write the Executive Director, Dr. Joseph J. Eller, 745 Fifth Avenue, New York City.

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1. Pollock, B. E., and Pruitt, F. W.: Am. J. M. Sc., 226:172, 1953.

THE G. A. INGRAM COMPANY
4444 Woodward Avenue, Detroit 1, Mich.

The American Goiter Association will hold its 1956 meeting at the Drake Hotel, Chicago, Illinois, May 3-4-5, 1956. The three-day program will consist of papers and discussions dealing with physiology and diseases of the thyroid gland.

For information, write John C. McClintock, M.D., Secretary, 149½ Washington Ave., Albany, N. Y.

* * *

Joseph M. Grace, M.D., Detroit, and **David R. Limbach, M.D.,** Flint, have been elected Fellows in the American College of Radiology.

Congratulations, Doctors Grace and Limbach!

* * *

Ralph Najarian has been appointed Schering Advertising Manager. Many Michigan doctors who remember Ralph Najarian as a Detroit pharmacist and long-time representative and exhibitor from the Schering Corporation will be happy to hear the news of his rise to eminence.

Congratulations, Ralph!

* * *

The Hawaii Medical Association cordially invites you to attend its Centennial Celebration and Scientific Congress, April 2-29, 1956. In addition to scientific sessions, a pageant depicting the colorful history of medicine in the Island, a luau (Hawaiian feast), and other events, with plenty of free time for sightseeing and relaxation are planned.

For information and reservations, write Hawaii Medical Association, 510 South Beretania St., Honolulu 13, Hawaii.

The Upjohn Company, of Kalamazoo, publishes the first newspaper of its kind for physicians and their associations. *Scope,* a weekly publication, is designed to bring to physicians current news and information of medicine and related sciences.

For subscription, write Physicians News Service, Inc., 130 E. 59th Street, New York 22, N. Y.

* * *

The University of Michigan Medical Center will be featured on the national television show, "Medical Horizons," Monday, December 12. The University of Michigan show will emphasize research in industrial medicine. Host will be O. T. Mallery, Jr., M.D., Ann Arbor, Director of the University Institute of Industrial Health. Also participating will be: Dean A. C. Furstenberg, M.D., Merle Lawrence, M.D., Walter Block, M.D. and Richard Black, M.D., all of the Medical School faculty, and Mr. Warren Cook of the School of Public Health.

"Medical Horizons," which is sponsored by Ciba Pharmaceutical Products, is scheduled for 9:30 EST, over the ABC Network, Detroit Station WXYZ-TV, Channel 7.

* * *

Congratulations to Parke, Davis & Company on their clever advertisement entitled "Is There One Question You're Too Shy To Ask Your Doctor?"—one of the cleverest and most eye-appealing advertisements ever written in behalf of the medical profession. The ad appeared in the December 10 issue of the *Saturday Evening Post.*

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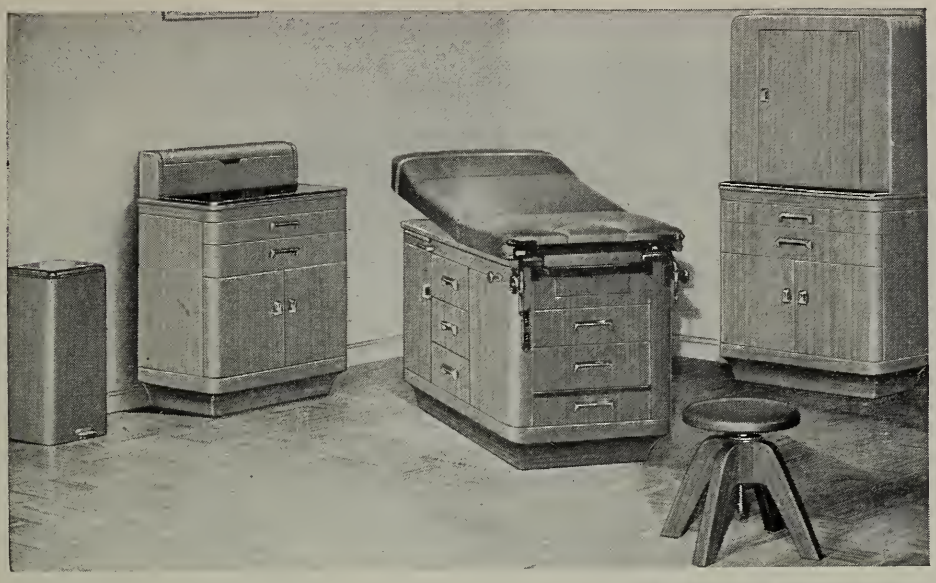
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James E. Lofstrom, M.D., Detroit, was recently elected as First Vice President of the Radiological Society of North America.

Congratulations, Dr. Lofstrom!

* * *

Many Michigan physicians will be among the employers coming under the provisions of the extended Michigan Employment Security Act. The Act has been expanded to include all employers who have as many as four employes on their payrolls during any 20 calendar weeks of the year. The effective date is January 1, 1956.

Explanatory letter may be obtained from the Michigan Employment Security Commission, 7310 Woodward Ave., Detroit 2.

* * *

The Michigan Diabetes Association will hold meetings coincident with the Michigan Clinical Institute. A luncheon meeting has been scheduled for Thursday, March 8, beginning at 1:00 p.m. in the Sheraton-Cadillac Hotel, Detroit, followed by a panel on diabetes. Participants are: Franklin W. Baske, M.D., Flint; R. B. Leach, M.D., Detroit, Richard M. McKean, M.D., Detroit and W. S. Reveno, M.D., Detroit.

For details, write Sidney Adler, M.D., 872 Fisher Bldg., Detroit.

* * *

More Doctors—There has been an erroneous public impression in some areas that the organized medical profession has maintained an indifferent or hostile attitude toward the expansion of medical training facilities.

Whatever condition may exist among some medical spokesmen, it is now clear that the profession in Michigan publicly recognizes the need for additional training facilities and is prepared to go to bat for them. This became evident at the 90th meeting of the Michigan State Medical Society at Grand Rapids.

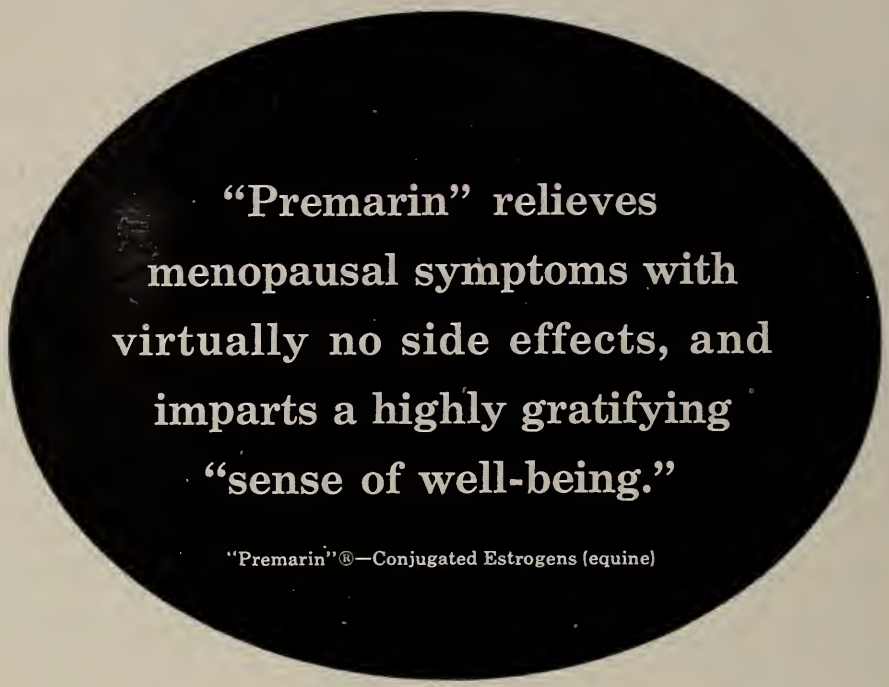
Appearing before its House of Delegates, the deans of Michigan's two medical schools urgently advocated the early establishment of a third college. The delegates expressed their approval.

"There should be another medical school in Michigan, and I see no reason why this state should not finance and operate another," Dean A. C. Furstenberg of the University of Michigan Medical School told the delegates. Dean Gordon H. Scott of Wayne University Medical School added, "it would take 10 years before its graduates could enter practice, even if the funds for expansion were available tomorrow."

Both deans pointed to the growing need for doctors, which has been highlighted in this state by the Michigan Health Council Placement Service. To date, the Service has helped more than 150 Michigan communities locate M.D.'s.—*Michigan Health Council Bulletin,* December, 1955.

* * *

The Kent County Medical Society Bulletin appeared in new garb with the January, 1956, number. The



attractive format includes a two-color cover (green and white) with modernistic design, and the Kent County Medical Society seal imprinted on the table of contents.

Congratulations, KCMS Bulletin!

Michigan Clinical Institute. Postgraduate credits are given to every MSMS member who attends the Institute. Notify John M. Sheldon, M.D., Chairman, MSMS Committee on Postgraduate Medical Education, 1313 E. Ann Street, Ann Arbor, Michigan.

Twenty-five former All-American football stars now are doctors of medicine—with two from Michigan—according to JAMA of December 31, 1955.

Clarence W. Spears, M.D., of Ypsilanti, was voted an All-American guard while playing at Dartmouth College (1914-1915).

William R. Cunningham, M.D., now retired and living in Grove City, Pennsylvania, was a University of Michigan center (1898) who gained All-American honors.

* * *

The International College of Surgeons will hold a regional meeting of its American Section in Madison, Wisconsin, April 26-27-28, 1956, with headquarters at the Loraine Hotel. This will be a midwest meeting, with all surgeons residing in this area invited to attend. Leading surgeons from throughout the United States will appear on the program.

* * *

The Jackson County Cancer Society and the **Jackson County Medical Society** are sponsoring a cancer-day symposium at the Hotel Hayes in Jackson on April 26, 1956.

In the afternoon a panel discussion of common problems in diagnosis and treatment of cancer will be presented by a group from the University of Michigan: Moderator—Frederick A. Coller, M.D., Professor of Surgery; A. C. Curtis, M.D., Professor of Dermatology and Syphilology; Isadore Lampe, M.D., Professor of Radiology; James H. Maxwell, M.D., Professor of Otolaryngology; Howard H. Cummings, M.D., Professor Emeritus, Post-Graduate Medical School; Reed M. Nesbit, M.D., Professor of Surgery. This will be followed by a question-and-answer period.

The speaker for the evening will be Alton Ochsner, M.D., Professor of Surgery and chairman of the Department of Surgery, Tulane University.

Attendance must be by reservation and the fee for the entire program is $10.00. For program and information, write R. E. Medlar, M.D., 719 17th Street, Jackson, Michigan.

* * *

The Wayne University College of Medicine Alumni Clinic Day and Reunion will be held on two days, May 8 and 9. The first day's sessions will be held at the Medical School, Detroit Receiving Hospital, the Lafayette Clinic, and the Kresge Eye Institute. This session

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will include ward rounds in the Detroit Receiving Hospital.

The second day's sessions will be held at the Fort Shelby Hotel where professional papers by guest speakers will be presented.

The Clinic Days will end with the annual reunion banquet at the Fort Shelby Hotel, which will honor the Class of 1906.

* * *

The Second Annual Nutrition Conference, sponsored by Wayne University College of Medicine, will be held in the Medical School Auditorium on Friday, April 13, beginning at 2:00 p.m. Speakers on the general subject "Nutrition and the Maintenance of Tissue Structure and Function" will include Albert G. Hogan, M.D., University of Missouri; Bertha S. Burke, M.D., Harvard University, and William J. Darby, M.D., Vanderbilt University. Further information may be obtained by writing the Department of Physiological Chemistry, Wayne University College of Medicine, Detroit 7, Michigan.

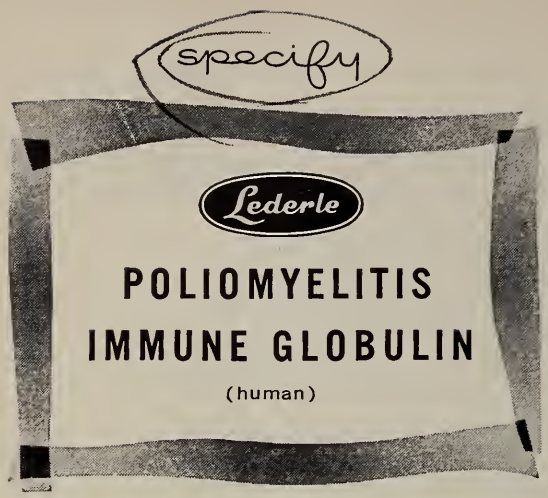
* * *

Leo Spears, the advertising Denver Chiropractor, lost an $11,000,000 law suit, according to report in the Denver Post of October 13. Chiropractor Spears' suit had been brought against the Denver area Better Business Bureau, the *Denver Post,* and eighty other defendants (including Colorado State Medical Society) who were charged with conspiracy to damage Spears' Chiropractic Institution.

Michigan Physicians at AMA Meeting in Boston, December, 1955: E. R. Addison, M.D., Crystal Falls; Hugh R. Allott, M.D., Sault Ste. Marie; Howard H. Angell, M.D., Kalamazoo; W. W. Babcock, M.D., Detroit; S. A. Beckwith, M.D., Stockbridge; Harry Berman, M.D., Flint; Melvin A. Block, M.D., Detroit; H. C. Bodmer, M.D., Kalamazoo; A. Peter Brachman, M.D., Allegan; William Bromme, M.D., Detroit; Brock E. Brush, M.D., Detroit; J. H. Buck, M.D., Ionia; Duncan Campbell, M.D., Detroit; Joseph Carp, M.D., Detroit; Wm. P. Chester, M.D., Detroit; Wm. T. Davison, M.D., Port Huron; Edw. E. Elder, Jr., M.D., Pontiac; Ira E. Falk, M.D., Detroit; John Ferguson, M.D., Traverse City; Robert C. Fonson, M.D., Detroit; and Alex S. Friedlaender, M.D., Detroit.

Harold H. Gay, M.D., Midland; Robert A. Gerisch, M.D., Detroit; Robert J. Golt, M.D., Ann Arbor; Elizabeth L. Gurden, M.D., Owosso; L. P. Haefele, M.D., Garden City; M. R. Hannum, M.D., Milan; Wilfrid Haughey, M.D., Battle Creek; Donald V. Hobbs, M.D., Detroit; A. E. Humphrey, M.D., Marshall; W. H. Huron, M.D., Iron Mountain; Arnold Jacobs, M.D., Detroit; F. T. Johnson, M.D., Kalamazoo; O. J. Johnson, M.D., Bay City; Wm. S. Jones, M.D., Menominee; Sydney N. Lyttle, M.D., Flint; Wm. H. McAlister, M.D., Detroit; Carey P. McCord, M.D., Ann Arbor; Leslie F. McCoy, M.D., Port Huron; and Robert C. Monson, M.D., Detroit.

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Surgical Anatomy and Clinical Surgery, two weeks, March 5
Surgery of Colon and Rectum, one week, April 9, May 7
General Surgery, two weeks, April 23
Basic Principles in General Surgery, two weeks, April 9
Gallbladder Surgery, ten hours, April 9
Fractures and Traumatic Surgery, two weeks, March 12
Varicose Veins, ten hours, March 19, April 30

GYNECOLOGY—Office and Operative Gynecology, two weeks, March 12, April 16
Vaginal Approach to Pelvic Surgery, one week, March 5, April 30

OBSTETRICS—General and Surgical Obstetrics, two weeks, March 26, May 7

MEDICINE—Internal Medicine, two weeks, May 7
Electrocardiography and Heart Disease, two-week basic course, March 12
Gastroscopy, forty-hour course, March 19
Dermatology, two weeks, May 7

RADIOLOGY—Diagnostic X-ray, two weeks, April 30
Clinical Use of Radioactive Iodine, one week, April 2
Clinical Uses of Radioisotopes, two weeks, May 7

PEDIATRICS—Intensive Review Course, two weeks, May 14
Neurological Diseases: Cerebral Palsy, two weeks, June 18

UROLOGY—Two-week Course, April 16
Cystoscopy, ten days, by appointment

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* * *

MICHIGAN INDUSTRIAL MEDICAL ASSOCIATION

Annual Meeting March 1, 1956

Hotel Olds—Lansing, Michigan

Morning Session—10:00 a.m.

PAUL J. OCHSNER, M.D., Lansing, *Moderator*
President, Michigan Industrial Medical Association
Welcome—JOHN M. WELLMAN, M.D., Lansing
President, Ingham County Medical Association
"Clinical Findings on Routine Chest Surveys"—ARTHUR L. STANLEY, M.D., Lansing
"New Concepts of Aging"—FREDERICK C. SWARTZ, M.D., Lansing
"Neck and Arm Pain—Its Causes and Treatment"—HERBERT W. HARRIS, M.D., Lansing

Luncheon—12:30 p.m.

American Room, Hotel Olds

Report on IMA Activity—EDWARD C. HOLMBLAD, M.D., Chicago
Managing Director of Industrial Medical Association

Afternoon Session—2:00 p.m.

WILFRED N. SISK, M.D., Kalamazoo, *Moderator*
"The Intervertebral Disc, An Industrial Problem"—SIDNEY GOVONS, M.D., Lansing
"Occlusive Arterial Disease"—CLAYTON LEWIS, JR., M.D., Lansing
"Industrial Dermatitis"—DONALD J. BIRMINGHAM, M.D., Cincinnati, Ohio
Chief Dermatologist, Division of Health Services, Occupational Health Field Headquarters.

Business Meeting—4:30 p.m.

Election of Officers

Cocktail Hour—6:00 p.m.

East Room, Olds Hotel

Annual Dinner—7:00 p.m.

PAUL J. OCHSNER, M.D., *Presiding*
"Acute Hand Emergencies"—JOHN BELL, Chicago

91st Annual Session

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Date-1955	*Station*	*Subject*	*Guests*
Nov. 3	*WKAR-TV, East Lansing*	Maternal and Child Care	Fanny Kenyon, M.D., Lansing
Nov. 6	WJBK-TV, Detroit	Medical Aspects of Civil Defense	Max L. Lichter, M.D., Detroit
Nov. 10	*WKAR-TV, East Lansing*	Under the Microscope	A. Garrard Macleod, M.D., Kalamazoo
Nov. 13	WJBK-TV, Detroit	Diabetes Detection Week	Crosby D. Eaton, M.D., Detroit
Nov. 17	*WKAR-TV, East Lansing*	Diabetes Control	William D. Hayford, M.D., Lansing
Nov. 20	WJBK-TV, Detroit	Driving in the City	A Film
Nov. 27	WJBK-TV, Detroit	Your Eyes	Edmond L. Cooper, M.D., Detroit
December 1	*WKAR-TV East Lansing*	Heart of the Home	Ernest T. Guy, Detroit
December 4	WJBK-TV, Detroit	High Blood Pressure	Robert H. Hamburg, M.D., Detroit
December 8	*WKAR-TV East Lansing*	Stop! . . . Rheumatic Fever!	A Film
December 11	WJBK-TV, Detroit	Johnny's New World	A Film
December 15	*WKAR-TV East Lansing*	Christmas Safety	A. E. Heustis, M.D., Lansing
December 18	WJBK-TV, Detroit	Holiday Traffic Safetv	Howard Cox, Detroit
December 22	*WKAR-TV East Lansing*	Holiday Traffic Safetv	Sgt. John Davies, East Lansing
December 25	WJBK-TV, Detroit	Stop and Go—The Safety Twins	A Film
December 29	*WKAR-TV East Lansing*	The Courts Protect Your Safety	Judge Marvin Salmon, Lansing

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The bulk of resources is in the hands of relatively few foundations.

A total of $4,200,000,000 (93 per cent of all foundation assets) is held by fewer than 20 per cent of the foundations studied. The other 80 per cent have total assets of $298,798,000, less than the assets of either the Ford Foundation or the Rockefeller Foundation. A total of more than $1,500,000,000 is held by the seven largest foundations: The Ford Foundation, $493,213,842; the Rockefeller Foundation, $447,686,573; Carnegie Corporation of New York, $178,861,599; W. K. Kellogg Foundation, $109,812,214; The Duke Endowment, $109,552,000; The Commonwealth Fund, $105,993,035, and The Pew Memorial Foundation, $104,987,129.

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GENESEE COUNTY MEDICAL SOCIETY

Eleventh Annual Cancer Day
Hurley Hospital, Flint, Michigan
April 11, 1956

Morning Session—9:30 a.m.

"Cancer of the Uterine Body; Its Diagnosis and Treatment"
NEWELL W. PHILPOTT, M.D., Department of Obtetrics and Gynecology, McGill University, Montreal, Canada

"Problems of Diagnosis and Therapy of Neoplasms Involving the Blood Forming Tissue"
LEON O. JACOBSON, M.D., Professor of Internal Medicine, Argonne Cancer Research Hospital of the University of Chicago, Chicago

"Psychiatric Aid in the Management of Cancer"
ARTHUR M. SUTHERLAND, M.D., Department of Neuro-Psychiatry, Memorial Center, New York

Noon Recess

Luncheon, Lobby Floor Cafeteria—Compliments of Hurley Hospital Board of Managers

Afternoon Session—2:00

"Past Achievements, Present Activities and Future Prospects for Cancer Prevention"
CARL V. WELLER, M.D., Department of Pathology, University of Michigan, Ann Arbor

"Soft Somatic Tissue Sarcomas"
THEODORE R. MILLER, M.D., Department of Surgery, Memorial Center, New York

Panel Discussion:

Moderator: H. MARVIN POLLARD, M.D., Department of Internal Medicine, University of Michigan, Ann Arbor

Members of Panel: DRS. PHILPOTT, JACOBSON, SUTHERLAND, WELLER and MILLER

Social Hour 5:30 p.m.
Subscription Dinner 7:00 p.m.
Durant Hotel

* * *

American Academy of Obstetrics and Gynecology.—More than 1,200 of the country's leading obstetricians and gynecologists were in attendance at the three days of scientific sessions at the Fourth Annual Clinical Meeting of the American Academy of Obstetrics and Gynecology which was held at the Conrad Hilton Hotel in Chicago, December 12-14, 1955. C. Paul Hodgkinson, M.D., Birmingham, was elected secretary, and the district chairman is Harold C. Mack, M.D., Detroit.

Attention AAGP Members:

The American Academy of General Practice Commission on Education has just announced that the Michigan Clinical Institute (Sheraton-Cadillac Hotel, Detroit, March 7-8-9) falls within Category II of the Academy's definition of acceptable postgraduate study.

Academy members who attend the 1956 Michigan Clinical Institute will receive credit toward their 100 hours of postgraduate study required in this category every three years.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

HISTORY OF MEDICAL PRACTICE IN ILLINOIS. Volume 11: 1850-1900. Issued by The Illinois State Medical Society approximately a century after the reorganization of the Society in 1850. Arranged and edited by David J. Davis, M.D., Ph.D., Permanent Historian and Member of the Permanent Committee on Archives of the Illinois State Medical Society; Member of the Illinois State Historical Society; Dean of the University of Illinois College of Medicine 1924-43, Dean Emeritus, 1943 to date; Professor and Head of the Department of Pathology of the University of Illinois College of Medicine 913-43, Professor Emeritus 1943 to date. Chicago: Illinois State Medical Society, 1955.

MEDICAL TREATMENT OF MENTAL DISEASE. The Toxic and Organic Basis of Psychiatry. By Daniel J. McCarthy, A.B., M.D., LL.D. Consulting Neurologist, Philadelphia General and Norristown State Hospitals; Associate Trustee, University of Pennsylvania; formerly Medical Director of Fairmount Farm and Roseneath Farm, and the Neuropsychiatric Service, St. Agnes Hospital, Philadelphia, and Professor of Mental Jurisprudence, University of Pennsylvania, and Kenneth M. Corrin, B.S., M.D., Neuropsychiatrist, Wilmington General Hospital, and Consulting Psychiatrist, St. Francis Hospital, Wilmington, Delaware; formerly Clinical Director, Wernersville State Hospital and member Psychiatric Staff Philadelphia General and Jefferson Hospitals, and Instructor in Psychiatry, Jefferson Medical College. With sections by eight contributors. Philadelphia and Montreal: J. B. Lippincott Company, 1955.

MENTAL HYGIENE IN PUBLIC HEALTH. By Paul V. Lemkau, M.D., Professor of Public Health Administration, Division of Mental Hygiene, School of Hygiene and Public Health, The Johns Hopkins University; on leave as Director of Mental Health Services, New York City Community Mental Health Board. Second edition. New York, Toronto, London: The Blakiston Division, McGraw-Hill Book Company, Inc., 1955. Price, $8.00.

During the six-year interval between the publication of the first edition of this book and the current edition, considerable progress in mental hygiene has taken place. Dr. Lemkau presents a comprehensive analysis of this new material and information.

Most of the volume is devoted to an attempt to find out what modifications of personality are possible, and to an explanation of those agents which have proven effective in the process. The concept of an interplay between personality structure and stress factors forms the basis of treatment. While it is true that the subjects of mental hygiene and of public health originated from opposite viewpoints, they have now been merged through necessity. Mental hygiene is an outgrowth of psychiatry, and began, therefore, as a concern about the individual. Public health, on the contrary, began with a concern

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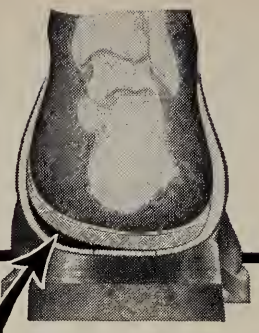
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about those factors which affect the health of groups rather than individuals. At the present time, the latter field is being forced to take individual health and individual treatment more into consideration.

The techniques of mental hygiene which range from the relatively impersonal printed article to the intensely personal relationships that may develop in recurrent small discussion groups under trained team leadership are discussed at considerable length. Dr. Lemkau points out frequently that techniques should never be allowed to become the central issue.

Methods of attacking the problem at the national, state, and local levels are presented. The need for proper organization is demonstrated. The development of the individual forms a large section of this volume. The book is well documented.

J.H.G.

SURGERY OF THE AMBULATORY PATIENT. By L. Kraeer Ferguson, M.D., F.A.C.S., Professor of Surgery, Graduate School of the University of Pennsylvania; Professor of Surgery, Women's Medical College of Pennsylvania; Surgeon, Graduate Hospital of the University of Pennsylvania; Woman's Medical College Hospital, Philadelphia General Hospital and Doctors Hospital. With a Section on Fractures by Louis Kaplan, M.D., F.A.C.S., Senior Attending Surgeon, Albert Einstein Medical Center, Southern Division; Clinical Professor of Surgery, Hahnemann Medical College; formerly Associate in Surgery, University of Pennsylvania; in charge of the Fracture Division of the Surgical Outpatient Department, Hospital of the University of Pennsylvania. Third edition. 664 illustrations. Philadelphia and Montreal: J. B. Lippincott Company, 1955. Price, $12.00.

Surgery of the Ambulatory Patient by L. K. Ferguson is not new to the industrial surgeon, those doing surgery of trauma and the general practitioner. In fact, the entire medical profession is well acquainted with this excellent treatise. The third edition is even more inclusive than its predecessors. One large new section takes up in detail the use of the adrenal hormone preparations. Anesthesiology is covered in detail, and much has been added on the newer antibiotics.

The detailed table of contents is a great aid in making this book useful as a reference. The new double column format makes for easier and more rapid reading. The illustrations are numerous and excellent, and many new ones have been added.

Many improvements and additions have been made in this already fine book. Anyone doing any type of office surgery should have this volume available at all times.

P.C.K.

CORTICOTROPIN. Its Pharmacologic Effects in Man and Practical Therapeutic Utilization. By Gordon B. Myers, M.D., William Q. Wolfson, M.D., Wayne University College of Medicine and Detroit Receiving Hospital. Detroit: Wayne University Press, 1955.

This monograph presents within seventy-six pages of text virtually every significant fact known about corticotropin at the time of publication. It represents a condensation of the voluminous literature available, and presents extensive personal experience. Both authors were

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VOLUME 55 MARCH, 1956 NUMBER 3

Contributors to This Issue



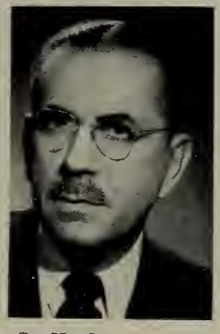
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W. H. Seegers, Ph.D.



C. S. Stevenson, M.D.

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Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 14, Minnesota.

Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, $6.00; single copies, 60 cents. Additional postage: Canada. $1.00 per year; Pan-American Union, $2.50 per year; Foreign. $2.50 per year.

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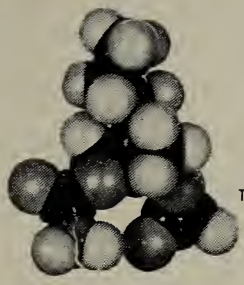
W. A. Hyland, M.D., Grand Rapids, *Chairman*.....1957
W. D. Barrett, M.D., Detroit.....1956
J. S. DeTar, M.D., Milan.....1957
W. H. Huron, M.D., Iron Mountain.....1956
R. L. Novy, M.D., Detroit.....1956
C. I. Owen, M.D., Detroit.....1957

Alternates

G. W. Slagle, M.D., Battle Creek.....(1) 1956
William Bromme, M.D., Detroit.....(2) 1956
J. R. Rodger, M.D., Bellaire.....(3) 1956
W. W. Babcock, M.D., Detroit.....(1) 1957
E. F. Sladek, M.D., Traverse City.....(2) 1957
O. J. Johnson, M.D., Bay City.....(3) 1957

Section Delegate

G. C. Penberthy, M.D. (Surgical Section).....Detroit



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INDUSTRIAL HEALTH

The sixteenth annual Congress on Industrial Health was held at the Sheraton-Cadillac Hotel, Detroit, January 23, 24, 1956. It was sponsored by the Council on Industrial Health of the American Medical Association, the Wayne County Medical Society, the Michigan State Medical Society, the Detroit Society for Surgery of Trauma, the Michigan Industrial Medical Association and the Detroit Industrial Physicians' Club.

On Sunday, January 22, 1956, the Conference of State Medical Society Committees on Industrial Health convened. The chairman, E. S. Jones, M.D., of the Council on Industrial Health of the AMA, presided. Orlen Johnson, M.D., Detroit, chairman of Michigan's Industrial Health Committee, gave the welcome. Committees were appointed and introductions and announcements were made. Clark D. Bridges, M.D., acting secretary, presented the summary of the year's work in mimeographed form. Each state chairman could make remarks or additions.

The program theme was "What We Expect from Our Committee on Industrial Health." F. Lee Stone, M.D., Chicago, president-elect of the Illinois State Medical Society, spoke from the standpoint of a State Medical Society President, giving a well-prepared listing of activities and opportunities. Earl A. Thayer, M.D., Milwaukee, spoke on the viewpoint of a State Medical Society Secretary. He stressed the importance of records, reports, and also many activities available to such a committee. Wilfrid Haughey, M.D., Battle Creek, spoke from the viewpoint of a State Medical Society Editor. He mentioned Michigan's various activities and devotion of certain numbers of THE JOURNAL to special topics, citing the August, 1955, number on industrial health. He mentioned activities of the University of Michigan Medical School in response to the gift by General Motors of $1,500,000 for industrial health research. A system of surveys is in process. Also Wayne University has a department established for about two years devoted to industrial health. The Editor took occasion to mention a few valuable rules in preparing a paper for presentation, and especially for publication.

Preston N. Barton, M.D., chairman of the Connecticut State Medical Society Committee on Industrial Health, spoke from the other side of the fence: "What the Committee on Industrial Health Should Expect from the State Society."

On Monday, January 23, Milton A. Darling, M.D., and Arch Walls, M.D., gave the welcome from Wayne County and the Michigan State Medical Society. The subject "Occupational Medicine in Industrial Relations" formed a very interesting and instructive symposium: "The Physician," Norbert J. Roberts; "The Nurse," Katherine A. Lembright; "The Employer," Charles B. Gorey; "The Labor Referee," David A. Wolff; "The Employer," Harry Read.

According to A. Hazen Price, M.D., a University of Michigan professor who is consultant to several large corporations, one fact which should be stressed is that older workers are not the major contributors to absence they have been believed to be. However, Dr. Price said older workers need to be eased into retirement and helped in their adjustments, as a major preventive against chronic disability. Yearly evaluation of individuals is needed, to stave off the physical and mental deterioration which results when the older worker faces a fixed retirement date.

Mental and emotional problems were flatly named as greater causes of absence than any occupational disease or accident, by Dr. Frank A. Calderone, public health administration, Long Island.

Dr. Calderone said true reduction in total absenteeism will occur when management, labor and industrial medicine allow the industrial medical service to do its proper job of prevention and counselling, thus enabling it to help the worker achieve and maintain the highest level of emotional and physical well being.

He said the key to the morale problems of industry, and to absence reduction, is the return of the relationship of "family doctor" to patient, involving "those rare qualities of understanding, of sympathy, of deep human concern, of affection."

The annual award given by the President's Committee on Employment of the Physically Handicapped was presented to Dr. Gradie R. Rowntree, medical director of the Fawcett-Dearing Printing Company, Louisville, Ky. Signed by President Eisenhower, the award was given to Dr. Rowntree by Maj. Gen. Melvin J. Maas, USMCR, retired, chairman of the President's committee.

One of the high points of the meeting was the award talk given by General Maas, who has been totally blind for four years and suffers from arthritis and diabetes. During the past year, he has travelled some 100,000 miles in the committee's work to get jobs for the handicapped and "restore to them their dignity."

One of the most striking features of the meeting was the discussion of auto accidents and safety, particularly the talks by A.M.A. president Elmer Hess, M.D., Erie, Pa., and Ford Motor Company vice president Benson Ford, Detroit, at the banquet Monday evening, Jan. 23, 1956.

Participating in a panel on "Medicine's Re-

(Continued on Page 236)



More physicians have successfully treated more patients for more indications over a longer period of time with tablets of

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INDUSTRIAL HEALTH

(Continued from Page 234)

sponsibilities in the Automotive Age," Dr. Hess suggested several steps toward reducing the "sordid" highway accident toll, including tougher driver license requirements with interstate standardization, stricter law enforcement, standardized safety improvements in automobiles, and a national research institute on safe driving.

While complimenting the automobile industry on its recent efforts to add safety features, Dr. Hess criticized its emphasis on power and "sizzling take-off." He said the industry should "make itself responsible for producing machines which do not tempt men to make fools of themselves."

Benson Ford disagreed with Dr. Hess on several points. He said he felt the development of safety equipment would advance more rapidly if kept highly competitive, so that industries would vie with each other to produce the safest cars.

He said that "unfortunately, there is a shortage of the cold scientific evaluation and fact-finding that we need in order to progress as fast as we should like in reducing the injury potential of the automobile interior."

Noting that the medical profession has recently entered more actively into co-operation on accident prevention fact-finding, such as the Cornell University research, Ford urged that doctors devote even more attention to these efforts.

He said the medical profession in the past has been "a sort of hair shirt" to the automotive industry on safety design, and the industry has sometimes "smarted under unjust criticism." He said the industry has accepted this because it is "just as interested in automotive safety as doctors are."

The meeting drew nearly 500 leading physicians, ranking medical officers of the armed forces, medical directors of major industries, nurses, and heads of departments or deans of universities engaged in industrial health study.

ANOTHER MEDICAL SCHOOL

The House of Delegates of the Michigan State Medical Society at the September, 1954 meeting instructed the Council to arrange for the 1955 meeting a panel of the Deans of our two medical schools. The proceedings of that panel were published on page 73 of THE JOURNAL for January. During the course of this discussion on September 26, 1955, in Grand Rapids, Dean Furstenberg and Dean Scott expressed the need of a third medical school in Michigan in the near future, because Michigan is not graduating enough medical students to supply more than half of our yearly requirements. This idea was developed editorially in THE JOURNAL for November, 1955 (page 1346).

The suggestion has borne fruit. The newspapers in Grand Rapids, for January 31, and others throughout the state carried a notice of a petition to be presented to the Board of Regents of the University of Michigan to establish a branch medical school in Grand Rapids. The Grand Rapids request for a branch medical school came when a citizen's committee petitioned the Board of Regents at Ann Arbor and suggested Calvin Cottage as a possible site for the school. The petition was timed to be given consideration at the next meeting of the Board of Regents scheduled for February 10.

At about the same time, the editor and some of the members of the Council of the MSMS received a ten-page letter from the Grand Rapids Citizens' Committee giving the arguments and facts to support their request.

In the past weeks, we have also heard of two other sets of plans for medical schools, but have seen nothing in print. One of the projects seems to have a promise of several million dollars to be used for the establishment of the school. Dean Furstenberg's idea seems to be bearing fruit.

DEDUCTIBLE PLAN FOR BLUE CROSS URGED IN HOUSE

Use of the "deductible insurance plan" on Blue Cross group hospital insurance was proposed by Rep. Allison Green (Kingston), Republican floor leader in the House, on January 31, 1956.

A reaction to the 15 per cent increase in Blue Cross rates March 1, the bill proposes that the subscriber pay the cost of the first day of hospitalization and 15 per cent of the cost for each day after the seventh.

"Blue Cross figures show that the average hospitalization is seven and one-half days," Green said.

"The deductible feature has served a definite purpose in the automobile insurance field and I can see no reason why it cannot be applied to hospital insurance as well."

Blue Cross has 3,600,000 subscribers in Michigan. Its rate structure is to be investigated by a study commission which will be appointed soon by Governor Williams.—*The Detroit News,* Jan. 31, 1956.

UNION PROPOSES COMPETITIVE HOSPITAL PLAN

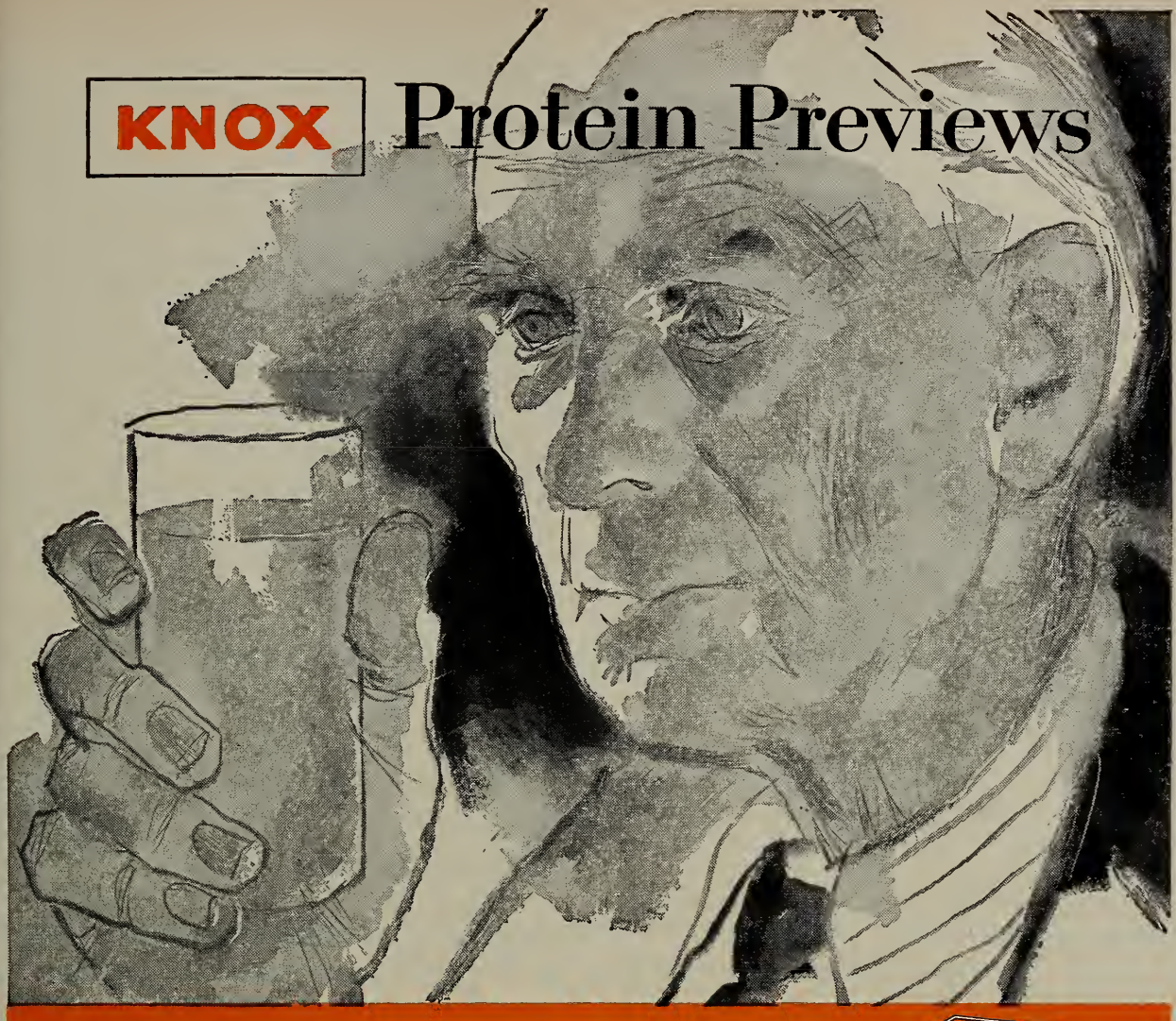
A proposed hospital and medical group payment plan was announced today, apparently in a labor union attempt to set up competition to the Blue Cross-Blue Shield organization.

The plan was disclosed in a letter from Detroit Attorney Harry H. Young to State Insurance Commissioner Joseph Navarre, asking for forms for articles of association.

The letter requested a meeting with Navarre to

(Continued on Page 238)

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Specific suggestions on how to use Knox Gelatine in different types of geriatric diets are described in the booklets listed in the coupon below.

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Indicate number of special diet booklets desired for your patients opposite title:

GERIATRIC_____ REDUCING_____

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YOUR NAME AND ADDRESS

UNION PROPOSES COMPETITIVE HOSPITAL PLAN

(Continued from Page 236)

arrange details of the plan and discuss rates to be charged.

The letter said, "The principal purpose is to cover the membership of a number of local unions in this area that are affiliated with the AFL-CIO." The unions were not identified.

Officials of the United Auto Workers Union, which has been critical of a recent boost in Blue Cross rates, said the international union was not involved in the new program but would be "watching with interest."

The letter to Navarre proposed two separate organizations for prepaid hospital care and medical-surgical service.

It said the plan, to be called "the Michigan Federated Unions Medical Plan," would include diagnostic and outpatient care, neither of which is included in Blue Cross-Blue Shield policies.

The letter said capital of $10,000 has already been subscribed for the new group. It said the plan would:

"'Provide its members with a fully pre-paid medical, surgical, obstetrical, ambulatory diagnostic and ambulatory treatment care, in-and-out patient care, either in doctors' offices, hospitals or clinics."—*Kalamazoo Gazette,* Sunday, February 5, 1956.

HOSPITALS BATTLE MEDICINE TAXATION

Trustees of the Michigan Hospital Association have threatened legal action to restrain the State Revenue Department from collecting sales taxes on medicine administered to patients.

The Revenue Department last November notified 250 private and nonprofit hospitals of intent to collect on drugs and food which heretofore have been a hospital service.

Hospitals were told they must be licensed by the Sales Tax Division before March 1.

Tax returns will be required after that date.

Revenue Director Louis M. Nims says the move is intended to curb tax-free sales of pharmaceuticals by nonprofit hospitals.

The hospitals do not interpret the order as so limited.

They insist that medication and meals are a part of the service they render in restoring patients to health.

Hospital insurance plans now do not cover taxes on food and drugs.

An immense amount of bookkeeping would be involved in separating the "service" accounts which the insurance covers and the taxes on the drugs and food which the patient would pay separately.

In Ohio, hospitals are fighting an attempt to collect a like tax on blood which generally is valued at about $35 a pint.—*Detroit Free Press,* February 3, 1956.

BREAK-DOWN

Of the 1673 doctors of medicine who attended the 1955 MSMS Annual Session in Grand Rapids, forty-five came from states other than Michigan, with Ohio leading the registration, closely followed by Ontario, Canada.

Of the balance of 1628, 257 were from Detroit and Wayne County. All specialties were represented, led by General Practice with 501. Surgery followed with 206, and Medicine with 122. Other totals by specialties were Pediatrics 55, Obstetric-Gynecology 53, Nervous and Mental 47, Ophthalmology 39, Public Health and Preventive Medicine 35, Radiology 31, Anesthesiology 28, Otolaryngology 20, Urology 20, Gastroenterology-Proctology 16, Pathology 14, and Dermatology-Syphilology 13. Physicians who did not list a specialty totalled 47.

A total of 125 interns and residents attended the 1955 (90th) MSMS Annual Session.

RESOLUTIONS APPROVED BY MSMS HOUSE OF DELEGATES—1955

RESOLUTION RE COMMITTEE ON DIVISION OF FEES (MMS)

WHEREAS, the Board of Directors of Michigan Medical Service has adopted the recommendations of the Special Committee of the Board of Directors of Michigan Medical Service, to divide the scheduled fee of Michigan Medical Service between physicians, and

WHEREAS, both the Committee and Board of Directors of Michigan Medical Service have recommended that Michigan State Medical Society develop the methods of implementation of this procedure; therefore be it

RESOLVED: That the recently appointed Study Committee on Fee Schedules for Michigan Medical Service be directed to review the entire surgical fee schedules with a view to correction of the above mentioned and any other inequities found in its study.

RESOLUTION RE STUDY OF SURGICAL FEES (MMS)

WHEREAS, the Michigan Medical Service is the creation of the Michigan State Medical Society and of the physicians of Michigan, and

WHEREAS, its continued growth and function requires, and indeed deserves, the full support and co-operation of all the physicians in the State, and

WHEREAS, it is now proposed the coverage be expanded to a still higher income group of the people of the State of Michigan, and

WHEREAS, the surgical fee schedule presently established by the Michigan Medical Service is not realistic in many respects, and

WHEREAS, this fee schedule is especially low for many operations usually done by the physicians in the so-called specialties groups, and

WHEREAS, the fee in these fields is often not commensurate with the skill, time and effort required, as compared with other surgery of a more general, or frequent, or more publicized nature, and

WHEREAS, this is particularly true in the operations not listed in the printed fee schedule; therefore be it

RESOLVED: That the recently appointed Study Committee on Fee Schedules for Michigan Medical Service be directed to review the entire surgical fee schedules with a view to correction of the abovementioned and any other inequities found in its study.

(Continued on Page 244)

Upjohn

Rheumatoid arthritis, rheumatic fever, intractable asthma, allergies . . .

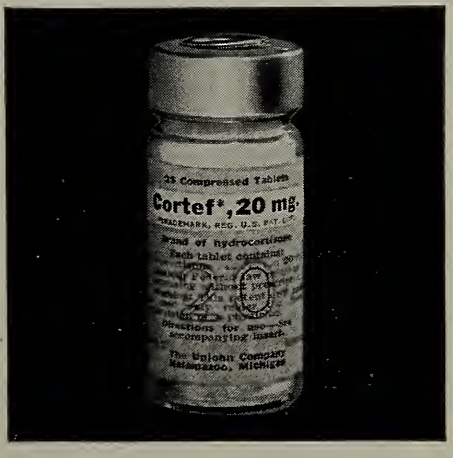
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Heart Beats

JONES CRITERIA (MODIFIED) FOR GUIDANCE IN THE DIAGNOSIS OF RHEUMATIC FEVER

In 1944, the late T. Duckett Jones, M.D., published criteria for the diagnosis of rheumatic fever which have been generally accepted in the United States and in many parts of the world. Subsequently Dr. Jones guided the revision of his criteria for use in the United Kingdom-United States Cooperative study on "The Relative Effectiveness of ACTH, Cortisone and Aspirin in the Treatment of Rheumatic Fever" and just prior to his death, he participated in a conference on the revision of his original suggestions for use by the practicing physician. These modified Jones criteria are based in great measure upon his suggestions.

Rheumatic fever is related to previous infection with group A beta hemolytic streptococci, but the mechanism of the disease is unknown. Its boundaries are indefinite, and its differentiation from other diseases is sometimes impossible. There is no specific laboratory diagnostic test. The diagnosis must therefore be arbitrary and empirical. Criteria herein set forth are aimed at identifying those individuals who have had or are having an attack of rheumatic fever. They make no attempt to measure rheumatic activity at any given time or to diagnose inactive rheumatic heart disease. Thus, following the designation of an illness as rheumatic fever, the existence of continued activity or the presence of inactive rheumatic heart disease may be indicated by criteria different from those outlined below.

Criteria are necessary in order to minimize both overdiagnosis and underdiagnosis. The tendency to label as rheumatic fever a chronic febrile illness for which no obvious cause can be found is to be deplored. The tragedy which may lie in the wake of the false diagnosis of rheumatic fever may be even greater than the possible harm of missed recognition in questionable cases. The institution of effective prophylactic regimens requiring prolonged administration of sulfadiazine or antibiotic agents places a grave responsibility on the physician in the diagnosis of this illness.

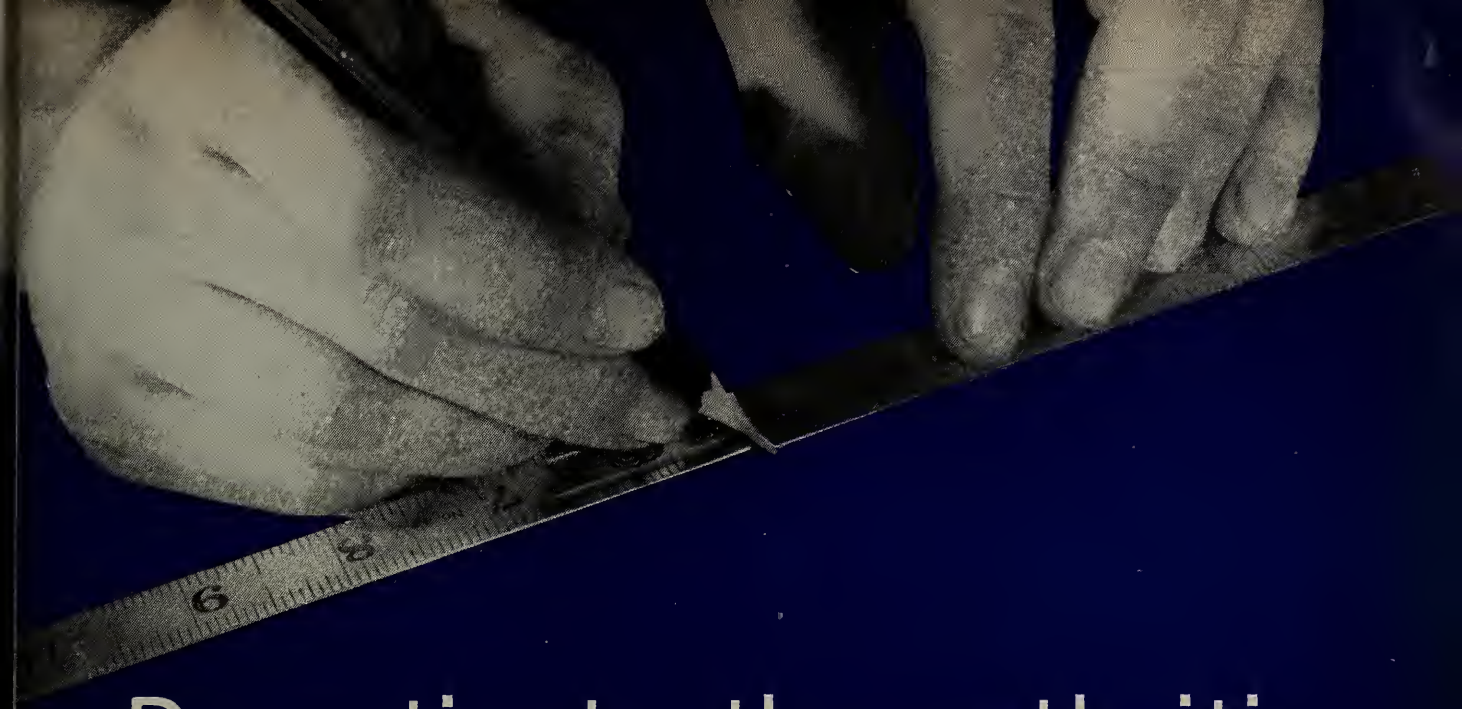
In this statement, the diagnostic features of the disease are divided as originally proposed by Jones into major and minor categories dependent upon their relative occurrence in rheumatic fever and in other disease syndromes from which this disease must be differentiated. Thus chorea is included among the major criteria while fever, a symptom common to many diseases, is placed in a minor category. *These major and minor categories have no significance beyond their diagnostic import either as to prognosis, amount of "rheumatic activity," or severity of acute illness.* Indeed, a severe manifestation of rheumatic fever such as rheumatic pneumonia is not included because it is difficult to differentiate from congestive cardiac failure and because it almost always occurs in patients whose rheumatic fever is so obvious as to offer no difficulty in diagnosis.

The presence of two major criteria or one major and two minor criteria indicates a high probability of the presence of rheumatic fever (with one notable exception, see the last paragraph under "Other Manifestations"). In addition to the major and minor criteria to be used in the recommended formula, other manifestations have been listed which may be used to support the diagnosis. These criteria are not meant to substitute for the wisdom and judgment of the clinician. They are designed only to guide him toward a diagnosis of the disease with the suggestion that he follow carefully all questionable cases and restrict the diagnosis of rheumatic fever to illnesses which meet acceptable criteria.

(Continued on Page 342)

This is a report of the Committee on Standards and Criteria for Programs of Care of the Council of Rheumatic Fever of the American Heart Association and has been approved by the Executive Committee of that Council.

Copies of Jones Criteria (modified) for guidance in the diagnosis of rheumatic fever may be secured free of charge from the Michigan Heart Association, Doctors Bldg., 3919 John R, Detroit 1, Michigan.



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Even where hydrocortisone, cortisone, and other agents had failed, prednisolone (STERANE) restored articular mobility and functional capacity to normal in rheumatoid arthritis.[1]

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References: 1. Bunim, J. J., et al.: J.A.M.A. 157:311, 1955. 2. Forsham, P. H., et al.: Paper presented at First Internat. Conf. on Prednisone and Prednisolone, New York, May 31-June 1, 1955. 3. Perlman, P. L., and Toiksdorf, S.: Scientific Exhibit presented at A.M.A. Annual Meet., Atlantic City, June 6-11, 1955.

PFIZER LABORATORIES Division, Chas. Pfizer & Co., Inc. Brooklyn 6, New York

*brand of prednisolone

(Continued from Page 340)

JONES CRITERIA (MODIFIED) FOR GUIDANCE IN THE DIAGNOSIS OF RHEUMATIC FEVER

Major Criteria

I. Carditis
II. Polyarthritis
III. Chorea
IV. Subcutaneous nodules
V. Erythema Marginatum

Minor Criteria

I. Fever
II. Arthralgia
III. Prolonged P-R Interval in the ECG
IV. Increased ESR, WBC, or presence of C-reactive protein
V. Preceding Beta-hemolytic streptococcal infection
VI. Previous rheumatic fever or inactive rheumatic heart disease

MAJOR DIAGNOSTIC CRITERIA

I. **Carditis** As evidenced by any one of the following:
 A. The presence of a significant apical systolic murmur,† apical mid-diastolic murmur‡ or basal diastolic murmur§ in an individual without a history of previous rheumatic fever or in whom there is good reason to believe there was no pre-existing rheumatic heart disease; or a change in the character of any of these murmurs under observation in an individual with previous history of rheumatic fever or rheumatic heart disease.
 B. Obviously increasing cardiac enlargement by x-ray.
 C. Pericarditis manifested by a friction rub, pericardial effusion, or definite electrocardiographic evidence.
 D. Congestive heart failure (in a child or young adult under twenty-five) in the absence of other causes.

II. **Polyarthritis** Polyarthritis tends to be migratory and is manifested by pain *and* limitation of active motion, or by tenderness, heat, redness or swelling of two or more joints. Arthralgia alone without objective evidence of joint involvement is not a major manifestation.

III. **Chorea** This must be differentiated from habit spasm, athetosis, and cerebellar ataxia. Movements must be characteristic, involuntary and of moderate severity if chorea is to be used as a major manifestation.

IV. **Subcutaneous Nodules** Subcutaneous nodules are shot-like, hard bodies seen or felt over the extensor surface of certain joints, particularly elbows, knees and wrists, in the occipital region, or over the spinous processes of the thoracic and lumbar vertebrae.

V. **Erythema Marginatum** This recurrent, pink, characteristic rash of rheumatic fever in which the color gradually fades away from its sharp scalloped edge, is found mainly over the trunk, sometimes on the extremities, but not on the face. It is transient, is brought out by heat and migrates from place to place.

MINOR DIAGNOSTIC CRITERIA

I. **Fever** A significant rise in tempertature is a common symptom, but, because it occurs in so many illnesses, it has little differential diagnostic value. In order to be included, the elevation in temperature must clearly exceed the normal diurnal fluctuation in which there is great individual variation.

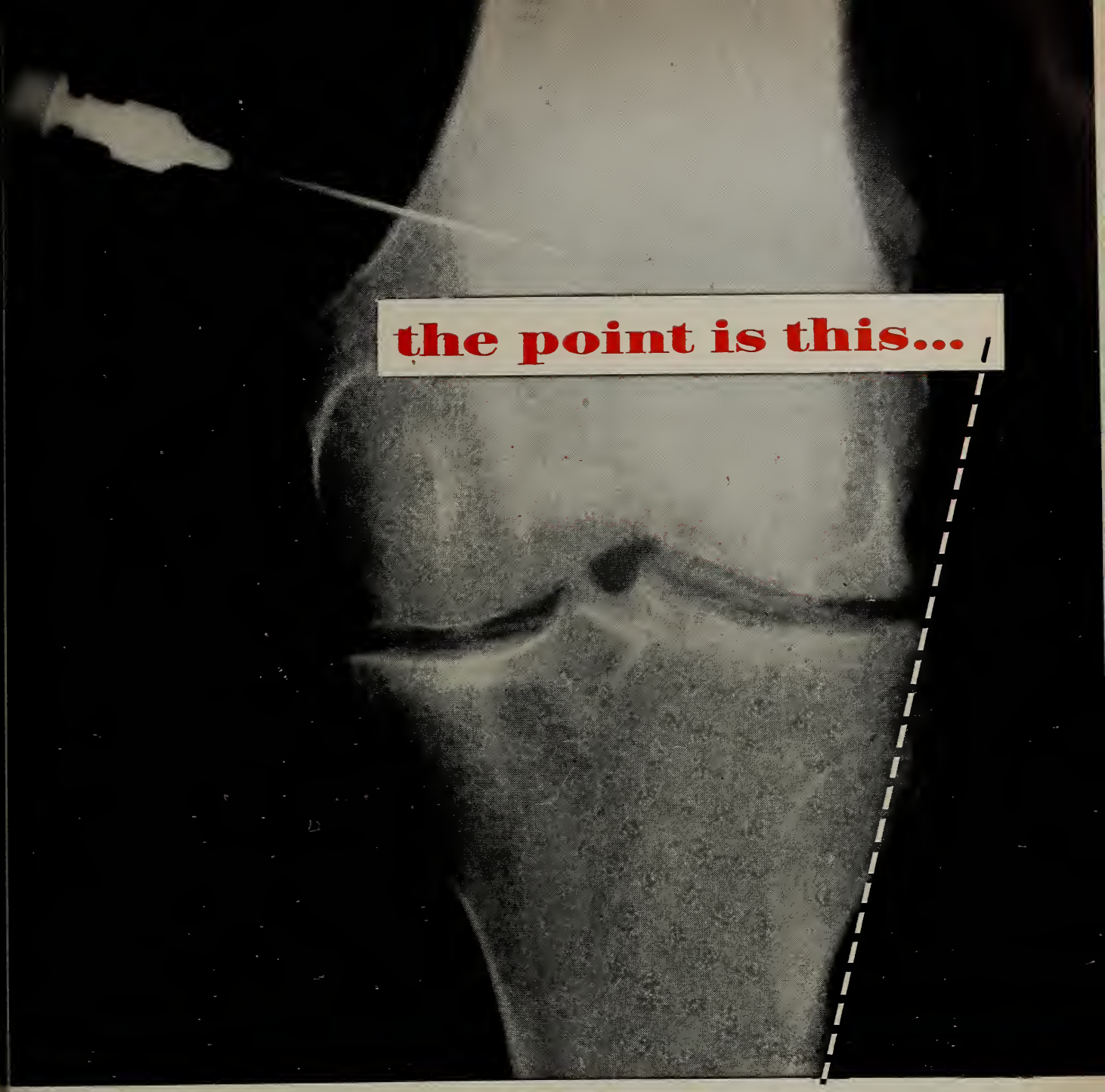
II. **Arthralgia** Pain clearly located without objective findings is only a minor criterion for diagnosis. The pain must be in the joint, not in the muscles or other periarticular

(Continued on Page 244)

†*A significant apical systolic murmur* is long, filling most of systole; is heard best at the apex; is as well transmitted toward the axilla as over the precordium; and does not change with position or respiration. It must be differentiated from an innocent (functional) murmur which is frequently found in normal people. This innocent murmur is systolic, occasionally harsh, is heard best along the left sternal border and usually changes with position and respiration. Borderline systolic murmurs, intermediate in location and nature. occur and should be carefully watched. Questionable murmurs which are intermittently present or which, after a period of observation, cannot be clearly classified as significant are rarely of any import.

‡A significant organic *apical systolic murmur* is frequently accompanied by a low-pitched, short *mid-diastolic murmur* which is sharply localized to the chest wall over the apex of the heart and often heard best with a patient in the left lateral position with the breath held in expiration. This murmur, rarely present in the absence of an apical systolic murmur, confirms the significant nature of the latter. It must be differentiated from the long, low-pitched, crescendo apical presystolic murmur followed by an accentuated mitral first sound which is indicative of mitral stenosis but not of acute carditis.

§The development of a *basal diastolic murmur* of aortic insufficiency is also indicative of carditis. It is an early, short, diminuendo murmur usually heard only or heard best along the left sternal border in deep expiration. It has great diagnostic value, even though it may be difficult to hear and present only intermittently.



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gives the arthritic patient more days of freedom from joint symptoms—in many patients the anti-rheumatic effect persists 2 to 10 times longer than after injection of hydrocortisone acetate. Its action is local and without systemic effect.

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MINOR DIAGNOSTIC CRITERIA

(Continued from Page 342)

tissues, and must be distinguished from the nocturnal pain in the extremities occurring in normal children. Arthralgia must not be used as a minor criterion when polyarthritis is included as a major criterion.

III. **Prolonged P-R Interval in the Electrocardiogram** Prolongation of the P-R interval may be nonspecific; it is considered a minor criterion and is not diagnostic of carditis. It cannot be used if carditis is already included as a major manifestation.

IV. **Increased Erythrocyte Sedimentation Rate, Presence of C-reactive Protein, or Leukocytosis** Elevation in one or more of these nonspecific tests may be considered as a single minor criterion. Particularly to be deplored is the tendency to use any of these tests as a major criterion or as diagnostic of rheumatic fever. There are many other nonspecific tests, but these three are most commonly used.

V. **Evidence of Preceding Beta Hemolytic Streptococcal Infection** This must be documented by (1) a history of scarlet fever or by a typical clinical picture of other streptococcal infection preceding the onset of rheumatic fever by one week to one month, the nature of the infection being confirmed by a history of immediate contact with other individuals having typical streptococcal infection or by positive culture of the nose or throat in which beta hemolytic streptococcus predominates; or (2) an elevated or rising antistreptolysin-O titer.

VI. **Previous History of Rheumatic Fever or the Presence of Inactive Rheumatic Heart Disease** The existence of either of these may be used as a minor criterion to aid in deciding the rheumatic nature of the illness in question. For this use, the previous history must be documented by the same objective criteria as are set forth in this statement or by the presence of inactive rheumatic heart disease.

OTHER MANIFESTATIONS

These include systemic manifestations such as loss of weight, easy fatigability, elevated sleeping pulse rate (tachycardia out of proportion to fever), malaise, sweating, pallor or anemia, and local manifestations such as epistaxis, erythema nodosum, precordial pain, abdominal pain, headache, and vomiting. These as well as a family history of rheumatic fever, provide additional evidence of the presence of rheumatic fever but are not to be included as diagnostic criteria.

There are combinations of these diagnostic criteria which occur in the presence of other illnesses which must be ruled out before a definitive diagnosis is made. One combination in particular —polyarthritis, fever, and elevated sedimentation rate—is the weakest of all combinations of major and minor criteria. Diseases to be ruled out include rheumatoid arthritis, gonococcal arthritis, lupus erythematosus disseminatus, subacute bacterial endocarditis, nonspecific pericarditis with effusion, leukemia, sickle cell anemia, serum sickness (including manifestations of penicillin sensitivity), tuberculosis, poliomyelitis, undulant fever, and septicemias, particularly meningococcemia.

COMMITTEE ON STANDARDS AND CRITERIA FOR PROGRAMS OF CARE

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YOU AND YOUR BUSINESS

Resolutions

(Continued from Page 238)

RESOLUTION RE HOSPITAL PRIVILEGES

WHEREAS, sufficient interest was manifested by the delegates at the last meeting of the American Medical Association in the state of tension caused by the disproportionate financial reward for surgical as opposed to diagnostic and medical procedures, with its resultant encouragement of unethical procedures and unfavorable publicity, to demand that the full report of the Special Committee on Medical Practice be made available to them, and

WHEREAS, our own delegates to the AMA can only act intelligently if they are made aware of our own feelings in the matter; be it therefore

RESOLVED: That this body go on record as strongly urging that if the following program is not already satisfactorily put into operation, it be initiated immediately:

1. That a subcommittee of the Medical Practice Committee be created to begin work on a relative value scale for the whole of the practice of medicine and surgery. Such a subcommittee could begin with the relative value scale produced by the thoracic surgeons (the only group which, as far as we can determine, has produced such a scale), and develop and broaden this approach, calling in as consultants representatives of general practice and all the specialties, as well as using the service of such nonmedical advisers as are needed.
2. That a program of public education on the value of diagnostic and medical work be fostered by the AMA Public Relations Department to increase public appreciation of non-surgical work.
3. That the AMA Public Relations Committee recommend to the various specialty boards consideration of the hardships imposed on recent diplomates by the restrictive regulations which limit their practice of their specialty during the early years of establishing a practice.
4. That the AMA, through its official channels, encourage the formation of general practice sections in the organization of hospital staffs, and that each staff applicant be evaluated on his individual merit.

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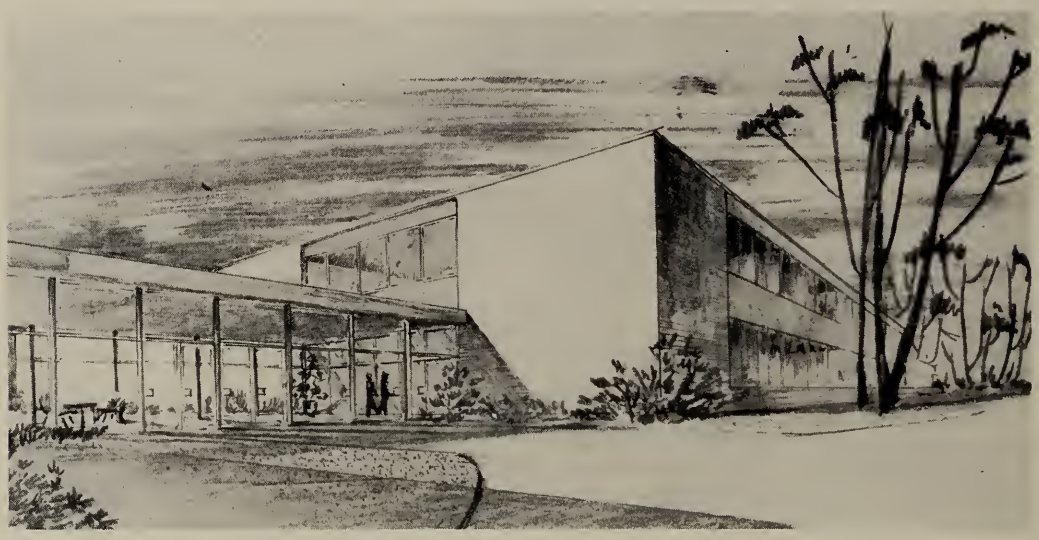
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Wayne County Medical Society's New David Whitney House



The Wayne County Medical Society, through a vote of its membership last spring, voted to build a new David Whitney House on the site of the developing medical center area in Detroit.

During the past year, architectural plans have been developed calling for a contemporary style of structure designed to provide meeting space for both large and small groups. The building will be ideally suited for any type of society dinner or luncheon meeting.

The expressway development in Detroit will make the location of this new headquarters accessible from all points of the city.

New expansion of the medical center area promises to increase the importance of the strategic location of the building. A medical library, construction to begin this May, will be in close proximity; joined, in fact, by an underground passage. A large auditorium, similarly accessible, will be built in the near future.

Plans indicate that ideal apartment and single dwelling homes in a landscaped area will border the medical center on the east. Personnel working in the area will have convenient and pleasant housing. Adequate parking areas have been designated. Land for expansion of the medical center has been made available toward the west and south of the medical science building, joining up with the Civic Center on the river front.

Such developments in Detroit medicine are long overdue. The Wayne County Medical Society is the fourth largest county medical organization in the United States. Detroit, a growing population center, is calling for expanded medical services, as it is also demanding new highways, educational facilities, housing and general civic development.

The physical relationship of the new headquarters to the teaching of medicine provides an opportunity for integrating medical education into the Society's program. The present and the future call for fulfilling the increasing needs for a continuing educational program for the benefit of all practitioners.

The Wayne County Medical Society can offer such a program aided with the facilities of the new David Whitney House.

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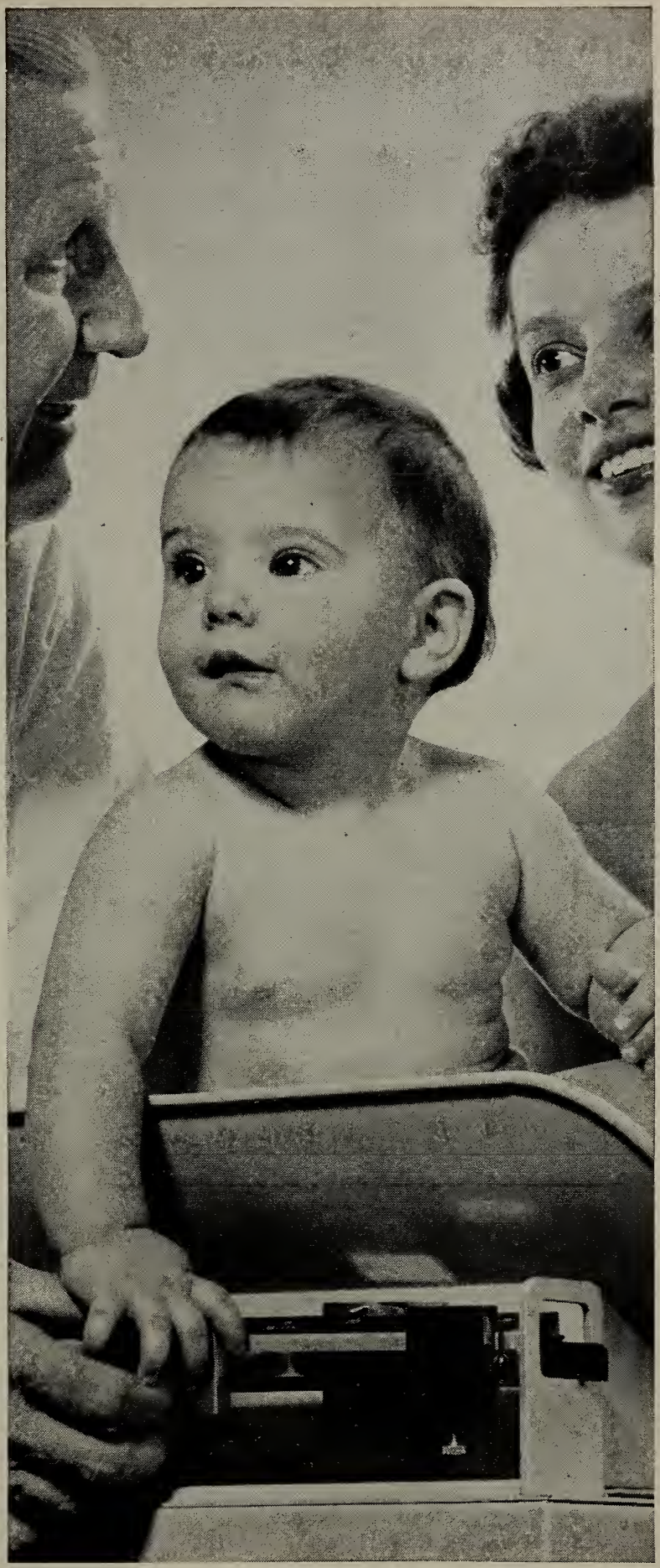
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AMA Washington Letter

THE MONTH IN WASHINGTON

All too frequently overlooked in Congressional activity on health and related bills each year are the little-publicized but highly important appropriations measures—without which no program of the federal government could move forward. The appropriations hearings in the House (where all money bills must originate) rarely get headlines they are conducted behind closed doors. Weeks and some times months later, the hearings are published, but by then the bill supplying money for an agency has been reported to the House.

It's only when the measure gets to the Senate that private groups and individuals are heard—by then in open sessions. Closed House sessions are not new. That is the way it has been done ever since Congress set up a separate committee on appropriations back in 1865.

The importance of appropriations in running the federal government was clearly illustrated when the President submitted to Congress his 1,272-page budget message in which he sought $65.9 billion for all federal programs for the fiscal year beginning July 1.

While there was no overall total of projected spending by all the agencies in the health field, the budget requests for the Department of Health, Education, and Welfare showed a sharply upward trend. And if certain new legislation is voted on this session—like the projected five-year program of construction grants for medical schools and private laboratory facilities—the total figure for subsequent years is likely to be even higher.

On the medical school-laboratory construction bill, the President asked Congress for $40 million for the first year (estimated cost over five years is $250 million). Construction grants, which would have to be matched on a 50-50 basis, would be available for private medical schools as well as non-federal laboratories conducting research into a wide range of crippling diseases.

The budget message also calls for another $30 million in outright grants, to the states to help them in financing poliomyelitis vaccination programs, the same amount appropriated by Congress last session. The administration in a separate request asked for extension of the polio law, from February 15, 1956 to June 30, 1957, and both the House and Senate with only brief debate voted the seventeen-month extension. Since only half of last year's $30 million was spent up to the February 15 expiration date of the original act, there was no rush for Congress to act on the new account.

Other new spending asked by the administration, contingent, of course, on enabling legislation, includes $10 million for initial capitalization of mortgage loan guarantees for health facilities; $5 million for graduate and practical nurse and professional health personnel training. $3 million for water pollution grants; $1.5 million for mental health expansion programs; and $1 million for sickness and disability surveys in the United States.

If Congress approves the requests, virtually all segments of the Department of HEW will have more money to spend than in this fiscal year. None would benefit more, however, than the medical research arm of government, the National Institutes of Health. The total sought for the seven institutes is 28 per cent more than estimated spending this year. Here are some examples: National Cancer Institute, $32,437,000 up 29 per cent; National Heart Institute, $22,106,000, up 17 per cent, and the National Institute of Allergy and Infectious Diseases (formerly the National Microbiological Institute), $9,799,000. a 26 per cent increase.

The President requested $130 million for the Hill-Burton hospital-clinic construction program which will be ten years old this August. In this connection Congress has been asked to extend the act for two years beyond next year, and action is expected this session.

Notes

After a study of possibilities in the peaceful uses of atomic energy, a panel has recommended, among other things, that the United States encourage states and private organizations to take full advantages of the opportunities offered by radioactive material for medical research and treatment.

It now appears that an improved and more uniform program of medical care for service families will be adopted this session—possibly before this is published. One feature: A $25 deductible charge in civilian hospitals, but with the government paying the full insurance premium, and a mandatory subsistence charge in military hospitals.

Making slower progress is the plan—under consideration for more than a year—for a health insurance program for U. S. civilian workers. Here the government would pay about half the cost.

Several committees are urging stricter penalties and other changes to bring the illicit narcotic traffic under better control; so far no suggestion of more controls over the medical profession in the handling of narcotics.

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

VOLUME 55 MARCH, 1956 NUMBER 3

Medical Education

By Gordon H. Scott, Dean
Wayne University College of Medicine

When one is asked to prepare a statement for a special issue of The Journal of the Michigan State Medical Society devoted to one's own school, the temptation to call attention to its many advantages is almost irresistible. However, it would seem that since Michigan has two excellent medical schools, each with unique virtues, it might be well to point out some of the issues which face both, for it is only by the solution of these problems that either institution can continue to do a good educational job or even maintain its present standards. Furthermore, it seems especially apt to air these matters to the profession since it is quite clear that those things which affect the medical schools eventually reflect on the practising physician. Therefore members of the profession should be directly and personally concerned with the welfare of their parent institutions. Lack of concern in each group for the welfare of the other must eventually work to the detriment of both.

It is accepted that the modern medical school has to perform a variety of functions. It must turn out broadly educated and capable physicians; be responsible for the training of graduate physicians in the whole gamut of specialties; conduct a continuing educational program for all physicians; carry on fundamental and clinical research in many areas; provide personnel and facilities for educating future teachers and investigators in medicine and participate in a great variety of social experiments as they relate to health in its broadest aspects. In addition to this already great burden, a major portion of its faculty must care for the sick so that the proper medium will exist for its educational and research activities. This outlook and these responsibilities, which have been gladly assumed, are the things which have made medicine great in the past and which will continue to add to its stature.

To do all those things that have come to be expected of the modern medical school usually involves more than we have and more than the public seems willing to give. Health and its maintenance is of vast importance until the time comes when it must be paid for.

The burden of graduate education and residency training alone has created a load on faculty that is becoming almost too great to be borne. Physical plants, outmoded by most standards even before the war, are rapidly reaching a state which will require replacement rather than repair. Funds for the support of research are so readily available that many faculties are being drawn into research activities to the extent that undergraduate teaching is suffering. The more exciting business of training residents has captured the interest of clinical faculties with the result that the undergraduate medical student feels lost.

The balance must be restored, and soon, or the source of good medical manpower will inevitably cease to function effectively. The rewards of attention to the important business of undergraduate medical teaching must be made commensurate with the service performed. There is no evidence at hand that leads us to believe that the demands on medical schools made by the public and by the profession will lessen. Quite the contrary—they will probably increase. These must be paid for in the proper coin.

(Continued on Page 268)

History of the College of Medicine of Wayne University

By Fanny J. Anderson,
Detroit, Michigan

THE history of the College of Medicine of Wayne University began with the founding of the Detroit Medical College in 1868. The leading spirit in the enterprise was Dr. Theodore A. McGraw, who had returned in 1865 to the city of his birth to practice medicine after serving for two years in the United States Army as a contract surgeon. In his absence Detroit had developed into a metropolis with a population of 53,000, an important port on the Great Lakes and a growing industrial center. As far as the medical profession was concerned, however, there were neither state nor local societies in existence, nor were there any laws on the statute books for the regulation of the practice of medicine.

Dr. McGraw was one of a group of young physicians who, in his own words, "had learned courage and enterprise from the War." Realizing the need for professional cohesion, these young men banded together to organize the Wayne County Medical Society on May 3, 1866, and within the same year were publishing the *Detroit Review of Medicine and Pharmacy*. Through their influence, too, the Michigan State Medical Society was formed on June 5, 1866.

They found a thriving city dependent for medical care on one hospital, St. Mary's, organized in 1845 and operated by the Sisters of Charity on Clinton Street near St. Antoine. Hospital facilities, however, were greatly augmented by the opening of Harper Hospital on January 1, 1866. Situated roughly on the east side of Woodward Avenue between Brady and Alexandrine, the new hospital was housed in a group of frame buildings erected by the Government during the Civil War for the care of wounded soldiers. With its free dispensary for the poor, it afforded the younger physicians of the city opportunities for study and observation unequalled in the state.

As early as November 24, 1865, "certain resident physicians had inquired as to the possibility of a medical college in connection with the hospital offering to treat the patients gratuitously." The medical profession of the state had realized even at the time of its organization that the Medical Department of the University of Michigan in Ann Arbor lacked facilities for clinical teaching inherent in a large city. Dr. Zina Pitcher was so acutely aware of this fault that he had organized classes at St. Mary's Hospital, where he was chief of staff, for the benefit of medical students from the University, but finally abandoned the plan on the insistence of the Board of Regents. The opportunities afforded by the new Harper Hospital, reporting a total of 13,722 patients from March 1, 1867, to September 1, 1868, in addition to "dispensary" patients, were not overlooked. On March 27, 1868, a request was presented to the medical board of the hospital from Drs. Pitcher, Farrand, McGraw and Jenks and Professors Gunn, Palmer and Sager of the Medical Department of the University asking "what facilities could and would be furnished by the board to the faculty of the University if they should conclude to establish a medical school in Detroit."

Evidently nothing resulted from this request, for, one month later, under date of April 11, 1868, "Dr. McGraw submitted some suggestions to the board of trustees of Harper Hospital relative to the organization of a medical college." Trustees for the new school were appointed on May 18 and incorporation followed on June 11, 1868, the Articles of Association providing for capital stock to the amount of $30,000 in 1200 shares of twenty-five dollars each, the sum of $20,000 being paid in.

The first prospectus of the Detroit Medical College confirmed the high expectations for the new venture. The Board of Trustees was composed of men who were prominent and respected in the public life of the community. Dr. Edward W. Jenks was President of the Faculty and Professor of Obstetrics and Diseases of Women and Children; Theodore A. McGraw, Secretary and Professor of the Principles and Practice of Surgery and Clinical Surgery; George P. Andrews, Professor of the Principles of Medicine and

Mrs. Anderson is a member of the staff of the Library, Wayne University College of Medicine.

Microscopy; Samuel P. Duffield, Professor of Chemistry and Toxicology; C. B. Gilbert, Professor of Materia Medica and Therapeutics; William H. Lathrop, Professor of Physiology and General Pathology; James F. Noyes, Professor of Ophthalmology; N. W. Webber, Professor of General and Descriptive Anatomy; J. M. Bigelow, Professor of Medical Botany; P. P. Gilmartin, Adjunct Professor of Obstetrics and Lecturer on Medical Jurisprudence; H. O. Walker, Demonstrator of Anatomy.

Two buildings were leased from the hospital and adapted for the accommodation of 250 students. After the "preliminary course" which began on November 1, 1868, the "regular course" opened on February 2, 1869, and extended to June 5. Thirty-eight students received their degrees at the first commencement exercises at which a special oath was administered to the class. Dr. McGraw was the speaker for the occasion. An appropriate motto chosen for the college appeared upon the diplomas, *Salus populi suprema lex* (Safety of the people is the highest law).

Among the matriculants in 1871 was Henry Fitzbutler of Ontario, the first negro student to attend the institution. He was later graduated from the University of Michigan Medical Department and founded the Louisville National Medical College in 1888.

In 1872, the Michigan State Medical Society reported the results of a visit of inspection to the Detroit Medical College. "Twenty-three didactic lectures were given each week covering the subjects of anatomy, chemistry, physiology, obstetrics, diseases of women and children, practice of medicine, surgery, materia medica, insanity, medical jurisprudence, venereal diseases, and diseases of the eye and ear." They were "illustrated by the free use of the blackboard, diagrams, the cadaver, experiments, et cetera." Requirements for graduation included "dissection of the entire cadaver, a full course in the analysis of urine, chemical analysis and manipulation, attendance at two full courses of lectures and presentation of two medical essays on subjects chosen by the faculty"; three years spent in the study of medicine under the direction of a preceptor was a further requisite. The committee was also impressed with the clinical instruction offered by the two hospitals of the city: Harper, with accommodations for 100 patients and St. Mary's, with accommodations for sixty. In addition, the college maintained two dispensaries, open daily, one in the college building and the other at St. Mary's Hospital. Since the state provided no regulation of licensure at this time, a diploma from a medical college admitted the graduate to the practice of medicine.

Even though the state was indifferent to its responsibilities, the college was actively concerned with the organization of the Association of American Medical Colleges in 1876, the objective of which was "to consider all matters relating to reform in medical college work." Dr. Leartus Connor served as secretary and treasurer from its inception until its demise in 1883. Its dissolution then was caused by the withdrawal of the eastern members when the western schools attempted to raise requirements for a medical degree. A number of innovations advocated by the association were introduced into the curriculum of the school in its 1881-82 session. These consisted of a preliminary examination, lengthening of the regular term to six months, obligatory attendance on three terms of lectures instead of two, and the grading of courses. Increased practical work in the anatomical, chemical, pharmaceutical and physiological laboratories was required in the first two years and daily clinical work in the last year. Vivisection was "a specialty" of the college.

The catalogs of the school reflect the changes and expansion of succeeding years. The year 1875 was memorable for the organization of the Alumni Association. In 1879, Dr. McGraw became president and Dr. Connor, secretary. In the same year, St. Mary's Hospital opened its new building for patients on St. Antoine between Clinton and Mullett Streets and two blocks away, a rival medical school, the Michigan College of Medicine, opened its doors. According to the catalog of 1882-83, a board of counsellors composed of twenty-nine physicians living in the lower section of the state was responsible for examining candidates of the college for graduation. The school had recently acquired the museum of the Detroit Scientific Association and the library of the Detroit Mechanics' Society, consisting of several thousand volumes, "all of which will be thrown open at certain hours for the students free of charge." In 1884 the curriculum included "a short course in the histological laboratory" and lectures on nervous and mental diseases which were supplemented by visits to St. Joseph's Retreat for the Insane near Dearborn. The pathological labora-

tory, "this new but in the present day necessary laboratory," was under the direction of Dr. George Duffield.

On September 12, 1883, the college moved into its new home on Farmer Street between Monroe and Gratiot, which had been purchased from the Young Men's Christian Association in 1882 for the sum of $15,000. Rumors had begun to circulate as early as 1883 that the Detroit Medical College planned to unite with the Michigan College of Medicine. Although classes were graduated from both institutions in 1885, consolidation was well under way.

Michigan College of Medicine

Drs. C. Henri Leonard and Charles J. Lundy were the original instigators of the Michigan College of Medicine which was incorporated on October 24, 1879. A joint stock company was formed with a capital of $30,000. Physicians wishing to become members of the faculty paid $1000 for "leading chairs" and from $500 to $1000 for other appointments. A brick building, the former Hotel Hesse, located on the corner of Gratiot, Catherine and St. Antoine Streets, was purchased and a dispensary opened in 1879, although the preliminary session for students was not held until March 2, 1880. The regular session followed in September of that year.

The Board of Trustees of this school were men who were well known in the business and professional life of the city. Members of the faculty were the following: Henry M. Lyster, President of the Faculty and Professor of the Principles and Practice of Medicine; William Brodie, Professor of Clinical Medicine; J. B. Book, Professor of Obstetrics, Clinical Midwifery and the Clinical Diseases of Children; Daniel LaFerte, Professor of Anatomy, Orthopedic Surgery and Clinical Surgery; John J. Mulheron, Professor of Materia Medica and Therapeutics; C. Henri Leonard, Professor of Medical and Surgical Diseases of Women and Clinical Gynecology; Charles Douglas, Professor of Diseases of Children and Clinical Medicine; Theodore F. Kerr, Professor of Physiology, Histology and Genito-Urinary Diseases; Charles C. Yemans, Professor of Diseases of the Skin; Duncan McLeod, Professor of Hygiene and Sanitary Science; Eugene Smith, Professor of Ophthalmology and Clinical Ophthalmology; Charles J. Lundy, Professor of Clinical Diseases of the Eye and Diseases of the Ear and Throat; J. E. Clark, Professor of Medical Chemistry and Physics; William C. Maybury, Professor of Medical Jurisprudence; Charles Jungk, Professor of General Chemistry; Gus Schulenberg, Prosector to the Chair of Surgery; Williard Chaney, Assistant to the Chairs of Physiology and Laryngology; Aloys A. Thuner, Director of the Dispensary; Herbert W. Yemans, Clinical Clerk for the Medical Department.

Like its rival, the Michigan College of Medicine was pledged to uphold the highest standards in medical education and sent representatives to meetings of the Association of American Medical Colleges. It "demanded a matriculation examination recognized by the Council of Great Britain and Ireland," and requirements for graduation included "three graded courses of six months each in three separate years." The teaching of anatomy in all the medical schools of the state was greatly simplified in 1881 with the passage of a law whereby the demonstrator of anatomy at the University of Michigan was made the receiver of cadavers from the prisons and poor houses of the state and became the distributor to the medical colleges. This ended the type of episode featured in the headlines of the local papers under such captions as, "Resurrected," "Grave Robbers Invade Precints of Mt. Elliott Cemetery."

A hospital of twenty-five beds was established on the second floor of the college building on September 4, 1880. With the Dispensary and the Eye and Ear Infirmary it supplied facilities for clinical teaching. The Detroit Training School for Nurses under the direction of Mrs. Florence Nightingale Davies, a graduate of the New York Training School for Nurses, was instituted in connection with the hospital, and the first lecture of a two-year nursing course was presented by Dr. LaFerte on March 11, 1882.

No mention was made of a training school, however, when the faculty announced plans for enlarging the hospital to sixty beds chiefly to accommodate accident cases. In this connection, the college took great pride in its two ambulances and claimed to have owned the first one ever used in Detroit in 1880. A prepaid medical insurance scheme was proposed for raising funds whereby hospital tickets were issued to subscribers for five dollars entitling the holders to all hospital privileges for one year either in case of accident or acute disease. This met with immediate protests from the medical profession of the city.

In spite of denials to the contrary, early in 1885, a bill was passed by the state legislature permitting the stockholders of the two medical colleges to vote upon amalgamation. Representatives of Harper Hospital and the three medical schools of the state—the Detroit Medical College, the Michigan College of Medicine and the Medical Department of the University—saw an opportunity in the proposed union of the Detroit schools for developing a stronger Medical Department at the University of Michigan, which continued to be handicapped by a lack of hospital and clinical facilities. Dr. Donald MacLean, a prominent surgeon and professor of surgery in the University, was their host at a meeting held in Detroit on February 24, 1885. A plan was discussed whereby the three medical schools would unite into one institution, the Medical Department of the University, "the fundamental branches to be taught as at present in Ann Arbor, the practical and clinical subjects to be taught in Detroit, the hospital and other facilities being furnished to the school and to the University free of expense" by Harper Hospital. A committee to study the proposal was appointed consisting of President James B. Angell, chairman; Dr. Donald McLean, secretary; former Governor Baldwin, General Luther Trowbridge, Jacob S. Farrand, Dr. Theodore A. McGraw, Dr. H. F. Lyster and Dr. A. B. Palmer. But the long-standing policy of the board of regents against removing any part of the University from Ann Arbor blocked the scheme and the union of the Detroit schools proceeded. Articles of Agreement were drawn up and signed by both parties on June 6, 1885. The new school, to be known as the Detroit College of Medicine and Surgery, was incorporated for thirty years, with capital stock amounting to $100,000, in shares of twenty-five dollars of which the stockholders of each college received an amount equal to the value of the stock transferred by them. The new institution was to be governed by a board of trustees of fifteen members, not more than six being physicians. Professors of "practical chairs" were required to hold stock amounting to $300 fully paid; professors of "impractical chairs" (anatomy, physiology, materia medica, histology and microscopy, chemistry, medical jurisprudence, state medicine and hygiene, pathological anatomy) were required to hold $150 worth of stock, fully paid. Professors of both of the former colleges were to hold the same chairs in the new school as they had held before the merger, each professor dividing his chair with the corresponding professor of the other institution. Union of the two alumni associations became effective on March 3, 1885.

The new college of medicine opened its regular session on September 23, 1885, in the building formerly owned by the Michigan College of Medicine on the corner of Gratiot Avenue, St. Antoine and Catherine Streets. Dr. McGraw was president and Dr. Charles J. Lundy secretary of a faculty numbering twenty-eight professors and eight assistants, two lecturers and two demonstrators. The school was affiliated with Harper, St. Luke's and St. Mary's Hospitals and with St. Mary's Free Eye and Ear Infirmary. In addition, it operated its own eye and ear infirmary as well as an ambulance "where cases of accident and emergency are treated in the presence of the class prior to removal to one of the general hospitals." Plans were announced by the trustees for a new building late in 1888 to be erected on the northeast corner of St. Antoine and Mullett Streets.

The decade from 1890 to 1900 was a period of expansion. A College of Veterinary Surgery was opened as a department of the college on September 23, 1891, with Dr. H. O. Walker as Dean of the Faculty. Animals condemned by the agent of the Humane Society were utilized for teaching purposes. In 1895, the Detroit School of Anatomy and Scientific Horseshoeing was added under the auspices of the new department. A Department of Pharmacy, which was co-educational, was established on January 5, 1891, with Dr. J. E. Clarke as Dean. The Department of Dental Surgery held its first session on September 21, 1891, and its last announcement was issued for the session of 1909-10. Its journal, *The Odontoblast,* was published by students and the alumni association from 1896 to 1909. Indeed, there was considerable discussion of expanding the college into a university, possibly including the Detroit College of Law and the Detroit Museum of Art. This idea was introduced by General Trowbridge at commencement in 1892, and was endorsed by the Alumni Association at its annual meeting in 1894. It was at this same meeting that the alumni decided to publish a journal to be known as the *Leucocyte.* From May 8 to 11, 1899, they held their first annual clinic session in conjunction with their reunion.

By 1897, the college had improved its physical plant to provide quarters for its various activities. An addition to the main building had been constructed in 1892 for the Department of Dental

Surgery. After a destructive fire on December 17, 1896, the Trustees rebuilt on the same site, taking advantage of the opportunity to make a number of improvements. A new laboratory building was also constructed on Mullet Street to provide additional laboratory space.

The institution appeared to be in a prosperous condition. During the session of 1898-99, 191 students were enrolled in the medical school, forty-eight in the fourth year, which became a requisite in 1895. In the session of 1900-01, there were 226 with fifty-eight in the fourth year. The cost of a medical education at this time amounted approximately to the following: matriculation or registration, $5.00; lectures for each regular term, $60; hospital tickets for each regular term, $10; fee for practical obstetrics, senior year, $10; graduation or final examination, $30; laboratory fees, each $10.

The turn of the century heralded many changes in medicine, and particularly in the field of medical education. The Association of American Medical Colleges, of which the school was a member, had been revived in 1890. In 1899, Michigan, like many other states in the union, recognized the necessity for legislation regulating the practice of medicine, and, as a result the State Board of Registration in Medicine was created. According to the announcement of 1900-01, "acting under authority reposed in it, this board has approved and designated certain medical colleges as institutions whose graduates are entitled to registration without examination. Detroit College of Medicine has been so approvel and so designated."

After 1900, the college found it necessary to cope with new trends in the reform of medical education. In 1904, the American Medical Association created the Council on Medical Education and Hospitals "to act as its agent in efforts to elevate standards of medical education. Its functions were to make an annual report on existing conditions of medical education and make suggestions which may lead to gradual improvement in these conditions." A fateful visit was made to the school in December, 1909, by Abraham Flexner, who was engaged in making a survey of the medical colleges of the country under the auspices of the Carnegie Institution for the Advancement of Teaching. The survey was conducted with the co-operation of the American Medical Association and had far reaching effects in raising the standards of medical education in the United States. The report on the Detroit College of Medicine included the following points of criticism:

> Entrance qualifications, four-year high school diploma or equivalent, strictly enforced by the college; attendance, 161, 70 per cent from Michigan, 16 per cent from Canada; teaching staff, 104, twenty-five professors, seventy-nine other grades, no full-time teachers; resources available for maintenance, fees only, amounting to $22,000 (estimate), laboratories—separate, ordinary equipment for following subjects: chemistry, anatomy, physiology, pathology, clinical microscopy, histology, bacteriology; some additional equipment—museum, charts, books, other teaching adjuncts; clinical facilities, access to several hospitals where faculty are on the staff, obstetrical work mainly furnished by Woman's Hospital and by the Outpatient Department just started; post mortems hard to get; dispensary service, fair.

The college suffered a lethal blow in November, 1912, when it was given a Class B rating following an official survey by the American Medical Association. This was not wholly unexpected. The alumni association had been considering ways and means of securing an endowment fund since it had become known that the school was in dire financial straits. This state of affairs was not due to any mismanagement on the part of the trustees, but to the increased demands of medical education. Tuition from students now covered only one third of the actual cost of operation. On December 13, 1912, the Executive Committee of the Alumni Association, composed of Drs. E. W. Mooney, F. N. Blanchard, James Cleland, C. D. Brooks and R. C. Andries, drew up and signed a petition which was sent to the faculty and trustees, requesting them to make every effort to restore the college to its former standard of Class A.

It was now forty-four years since the Detroit Medical College had been founded. Dr. McGraw had reached the age of seventy-three. Dr. Don Campbell appraised the work of this quiet unassuming man in 1921 following his death:

> This school was conceived, founded and started by Dr. McGraw in 1869. To its development and growth he devoted many years of his life, into it he injected his own ideals of life, efficiency and uprightness, and it is chiefly to his influence that it was able to maintain its collegiate existence through that trying period of readjustment in the standards of medical education which saw so many similarly equipped schools go down to oblivion.
>
> In the Detroit College of Medicine there was a certain vitality nurtured by this great man and augmented by an honorable and efficient past, under whose guidance it was given the strength of character to withstand the

ordeals of the reorganization period and adjust itself to new conditions. Can any man say how much Dr. McGraw's high character and idealism contributed to this result?

A number of the faculty and trustees were contemporaries of Dr. McGraw and well advanced in years. They decided to sell the college outright to the highest bidder.

Fortunately for the future of the institution, Dr. Burt R. Shurly was President of the Alumni Association at this crucial time. At a meeting of the Board of Trustees, when an offer of $75,000 cash was made by the University of Detroit, he raised the bid to $76,000 cash and the Detroit College of Medicine was sold to him personally. Mr. Sidney T. Miller, Drs. Angus McLean, Don Campbell and Frank Walker participated in the transaction. The Association worked quickly and within a few days had raised $100,000, $61,000 of which was used to purchase the college property.

The American Medical Association had made certain stipulations for restoring the college to Grade A rating, and measures were immediately taken to comply with them. In May, 1913, the alumni pledged themselves to raise one million dollars in order to own and control the school, to provide scholarships and to establish a library fund. Conforming with the specification for premedical training, Dr. Shurly was instrumental in introducing requisite courses at Albion, Alma, Hope, Kalamazoo and Adrian Colleges. In association with David MacKenzie, then principal of Central High School, he organized a junior college which was prepared to offer a one-year course in biology, chemistry, French, German and English.

The school was re-organized and incorporated on August 19, 1913, under the name of The Detroit College of Medicine and Surgery. Sidney T. Miller was elected President of the Trustees. Dr. J. Henry Carstens, President, Dr. Shurly, Dean, and Dr. Frank Walker, Secretary, headed a teaching staff divided into ten departments and ten subdepartments. One of the objectives of the Alumni Association was attained in 1914 when the American Medical Association restored the college to Class A standing.

However, the institution was still beset by financial difficulties, and the question of merging with the Medical School of the University of Michigan had caused strife since the reorganization. The American Medical Association had recommended the union on the grounds that two schools within forty miles of each other was a duplication of effort. In February, 1917, the Board of Regents of the University adopted resolutions governing the establishment of a Graduate School of Medicine in Detroit:

"Resolved: That the Regents undertake the administration of a graduate school when the Detroit College of Medicine and Surgery shall have first surrendered its charter, conveyed to the Regents all real estate and equipment of which it is possessed, together with all rights and privileges in the hospitals of Detroit which it now enjoys and shall exert through its trustees and faculty its influence in continuing and extending such rights and privileges; (2) That rights deemed adequate by the Regents be secured to the University from Harper Hospital and other hospitals for the purpose of instruction in medicine and surgery and that a fund of not less than one million dollars shall first have been created in cash or approved securities to be transferred to and invested by the Regents for the benefit of said graduate school of medicine and surgery."

By April, 1917, the United States had entered the European War and the college came under government supervision. For a time, there were two military units in the school and the main building was remodeled for their use according to plans furnished by the War Department. During the session of 1916-17, 161 students were enrolled, sixty-four in the graduating class. Women were enrolled for the first time in 1917. Lt. Colonel Burt Shurly headed Base Hospital No. 36 from the Detroit College of Medicine and Surgery, the first 100-bed unit in the country. Before his departure, Dr. Shurly recommended the appointment of Dr. Walter H. McCraken, formerly Professor of Pharmacology, as Secretary of the school, which appointment was accepted by the Trustees.

By 1917, the college was in a precarious position, financially. It was impossible to raise funds for its support due to war-time demands. Oscar Marx, mayor of Detroit, was approached as to the possibility of securing aid either from the Community Chest or from the city, for the college was contributing generously to the war effort by training doctors, but money from these sources was not available. However, the mayor promised to try to secure the necessary money for maintenance should the Board of Education agree to supervise its expenditure.

The idea of incorporating the school as a unit of the contemplated College of the City of Detroit was discussed by Dr. R. L. Clark, President of the

Alumni Association; Dr. W. H. McCraken and Dr. Andrew P. Biddle, President-elect of the Board of Education, and they immediately proceeded to plan a campaign to achieve their purpose. As the first step, the Trustees withdrew the agreement with the University of Michigan. Publicity was effectively used to secure the support of alumni, the press, women's clubs and organizations of business and professional men. On February 18, 1918, Sidney T. Miller addressed a letter to the Board of Education in which he pointed out that all medical schools had been forced to ask for help due to the rise in the cost of medical education. He also drew attention to the long and honorable history of the college and to the fact that sixty pupils were preparing for a medical course at Central High School.

The Trustees request that the Board of Education ask the Common Council and the Board of Estimates for $30,000 and that the Board of Education take over and have entire management and charge of the medical school, the Trustees of the latter to keep charge of the granting of diplomas to the graduates until legislation can be obtained giving the Detroit Board of Education power to grant degrees, and the Detroit College of Medicine and Surgery will then surrender its charter and transfer to the Board of Education the full management of the medical school and all the buildings, real estate and equipment free of charge and free of debt.

It was not until October 23, 1919, proper legislation having been passed, that the Detroit College of Medicine and Surgery was transferred officially to the Board of Education. The college now formed an important unit in the rapidly developing College of the City of Detroit and, in 1933, when that institution adopted the name of the Revolutionary hero, Anthony Wayne, the Detroit College of Medicine and Surgery became the College of Medicine of Wayne University. A dream of the founders of the old medical school had materialized.

MEDICAL EDUCATION

(Continued from Page (261)

Each of us is aware of the immensity of the population problem that is faced by all educational institutions in Michigan. Your medical schools cannot shrug it off as a thing which will not directly impinge upon them and their activities. By the same token, the medical profession cannot remain unaffected by it. Together, they must decide which of two paths to follow—let nature take its course which can mean disaster, or do some constructive planning against the time when the necessities must be cared for. If it can be decided that planning is desirable, it must proceed step-wise. Then the only arguments that can be raised are these: Which steps should be taken and in what order should they be taken?

It would seem logical that the first order of business would be to determine what our existing medical schools' needs actually are in the way of physical plant, faculties and support to bring them to the peak of efficiency and orderly operation. In such a study, there must be a clean separation of real needs and those things which would be nice to have. Both are using tax monies, and the use should be wise and consistent with reality. When the existing schools are doing all they can reasonably be expected to do with first-class plants, then is the time to anticipate what more will be needed to do the job the state requires. The establishment and operation of a medical school is a costly business and should not be rushed into lightly in a period of prosperity. However, if the need exists, it should be undertaken as readily as any other educational responsibility. If it is not, then we can be sure that the proprietary-type school and all of its evils will find some way of returning to the scene.

This, then, is a plea for an orderly and realistic appraisal of the needs of medical education in Michigan and a careful inventory of the facilities which we possess. The study should be one in which the profession has a part, and having participated they will stand ready to exert such effort as is necessary to see that the needs are met.

Epithelium-like Cells Derived from Tissue Cultures of Human Bone Marrow and Ascitic Fluid

By Lawrence Berman, M.D.,
Cyril S. Stulberg, Ph.D., and
Frank H. Ruddle, B.S.

Detroit, Michigan

IN a previous communication a report was made of the establishment of a stable strain of human epithelium-like cells from tissue culture of the bone marrow of a patient with carcinoma of the lung.[1] This strain of cells (Detroit-6) fulfills certain criteria[9] for virological research. They grow rapidly in simple media on glass surfaces from which they can be released by trypsin for the preparation of suspensions of cells from which replicate cultures can be made. The virus susceptibilities of the Detroit-6 strain of cells have been described.[8] The close similarities of Detroit-6 and HeLa cells with respect to morphologic and growth behavior as well as virus susceptibilities were pointed out.[1,8] Further studies with methods previously described have resulted in the development of five additional strains of cells with similar morphologic and growth characteristics.

Methods

The procedures used are described in detail in our original report.[1] Briefly, the aspirated specimens of bone marrow or ascitic fluids were placed in a medium consisting of balanced salt solution, human cord serum, embryonic tissue extract and a pH indicator in 3-ounce medicine bottles lying on their flat sides. In all instances the epithelium-like cells first appeared in the cultures as isolated plaques of polygonal cells sometime after the appearance of a fibroblastic phase of growth. Originally the plaques of polygonal cells were removed mechanically for making subcultures which thereafter continued to grow as sheets of polygonal cells. In subsequent cultures it was found that frequent division and subculture of specimens containing both fibroblastic and polygonal cells were ultimately overgrown by the latter. There has been no reversion of once-established polygonal or epithelium-like cell cultures to a fibroblastic form.

Three of the new strains, namely, Detroit-32, Detroit-34, and Detroit-52 were obtained from cultures of sternal bone marrow and the other two, Detroit-30A and Detroit-56A were cultured from carcinomatous ascitic fluids.

Figures 1 through 6 illustrate the appearances of these cells grown on glass coverslips. Table I includes information pertaining to the histories of the various strains.

Discussion

The Detroit strains grow in the fashion of epithelium[2,10] and, by ordinary methods of light microscopy, are not distinguishable from the cells of the HeLa strain isolated by Gey et al[6] from a carcinoma of the cervix. Nevertheless, in view of the difficulties in distinguishing between true epithelial cells and other types of cells in tissue cultures we have designated them as epithelium-like cells, using criteria similar to those stated by Chang[3] and Southam.[7] Inasmuch as the Detroit strains, as well as those isolated by Chang from normal human tissues, by Frisch[5] from pleural fluid of a patient with adenocarcinoma of the lung, by Southam from various normal and malignant tissues, all may have contained cells other than an epithelial component, it is not permissible to assume that they are truly epithelial. Because of the fact that their morphologic characteristics and growth behavior are similar to that of epithelium, they can be considered epithelium-like. The usefulness of such strains of cells derives from their human origin and their susceptibility to handling in bulk without modification of form and in a manner permitting the making of replicate samples. According to the recommendations made by

From the Departments of Pathology, Wayne University College of Medicine and Detroit Receiving Hospital, and the Child Research Center of Michigan. This investigation was supported in part by each of the following: research grants (C-2149) from the National Institutes of Health, Public Health Service, (E859) from the National Microbiological Institute, the Receiving Hospital Research Corporation; and by institutional grants from the American Cancer Society, Inc., and the American Cancer Society, Southeastern Michigan Division.

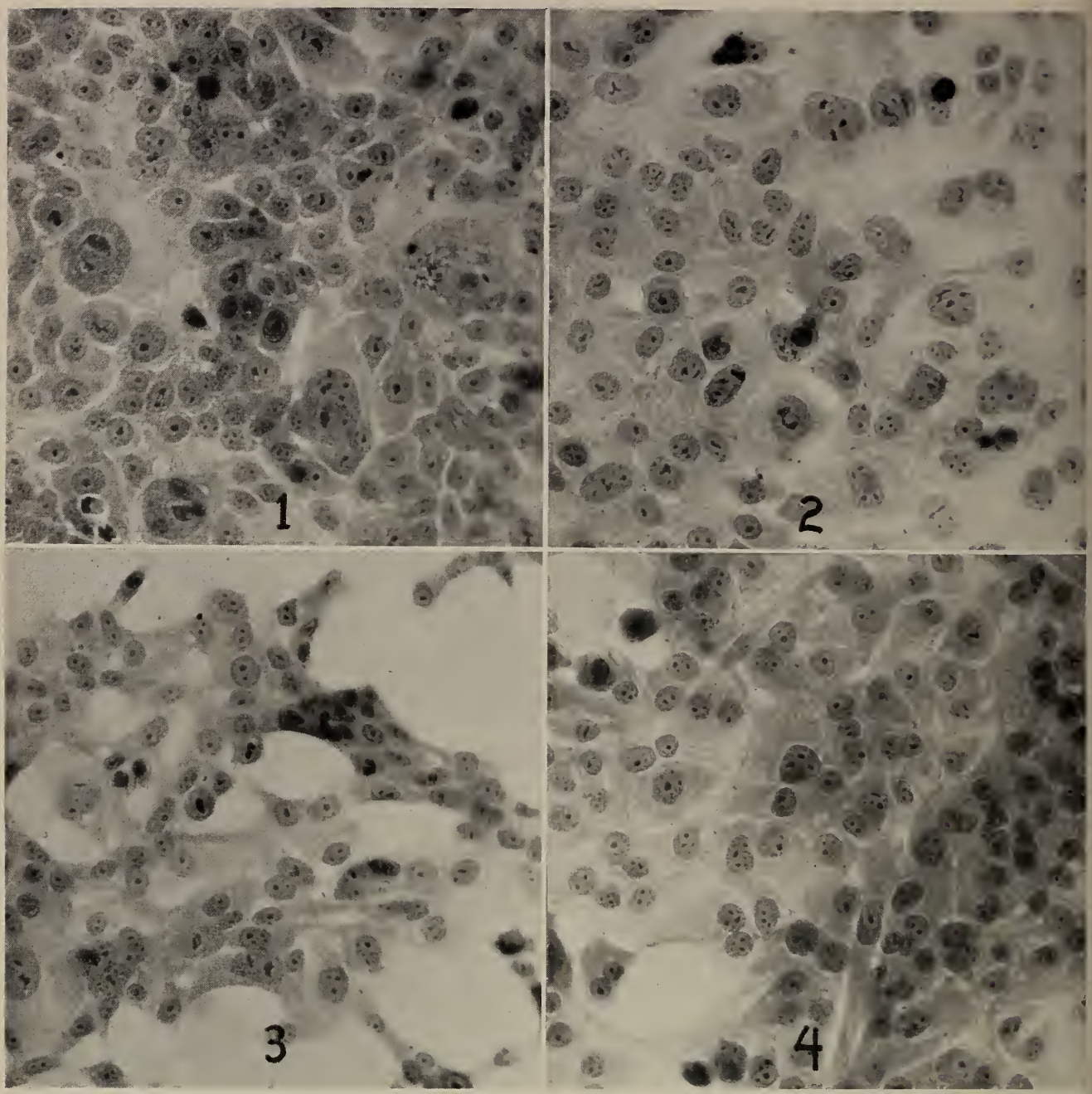


Fig. 1. Detroit-6 cells. 280X
Fig. 2. Detroit-30A cells. 280X
Fig. 3. Detroit-32 cells. 280X
Fig. 4. Detroit-34 cells. 280X

Earle[4] the Detroit-6 strain can be considered an established strain and the others, having been maintained continuously for periods over six months but less than one year in a reasonable state of equilibrium, qualify as newly established strains.

As recently as 1954, it was stated by Chang that epithelium-like cells have been successfully cultivated *in vitro* from various human tissues but that continuous subcultivation of epithelium-like cells derived from normal human tissue had not been reported. To this it can be added that continuous cultivation of stable strains of malignant human cells has, up to recently, been a difficult problem.

Although the cells of the Detroit strains exhibit many of the classical features of malignant cells (irregularity in size and basophilia, polyploidy, abnormal mitoses, rapid growth), the peculiar conditions of *in vitro* growth must be taken into account as a cause of the aberrant growth behavior of epithelium-like cells. A determination of the possible malignant characteristics of epithelium-like cells must be based on the biologic activities of

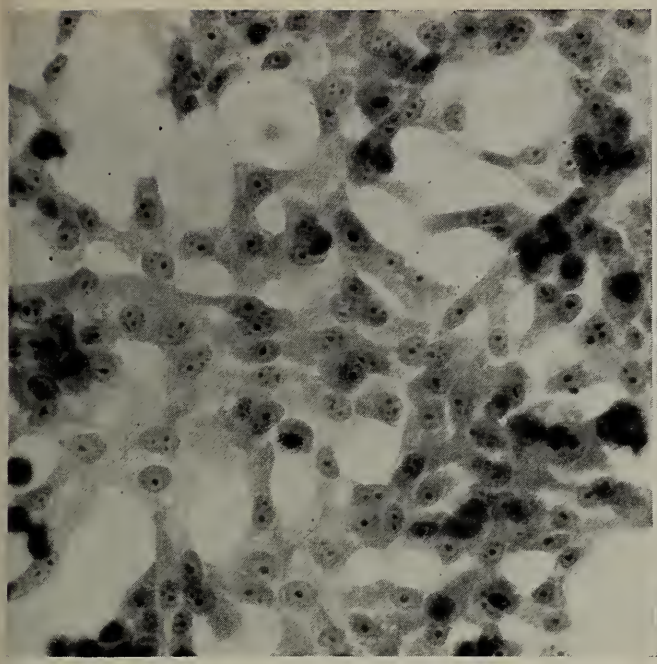


Fig. 5. Detroit-52 cells. 280X

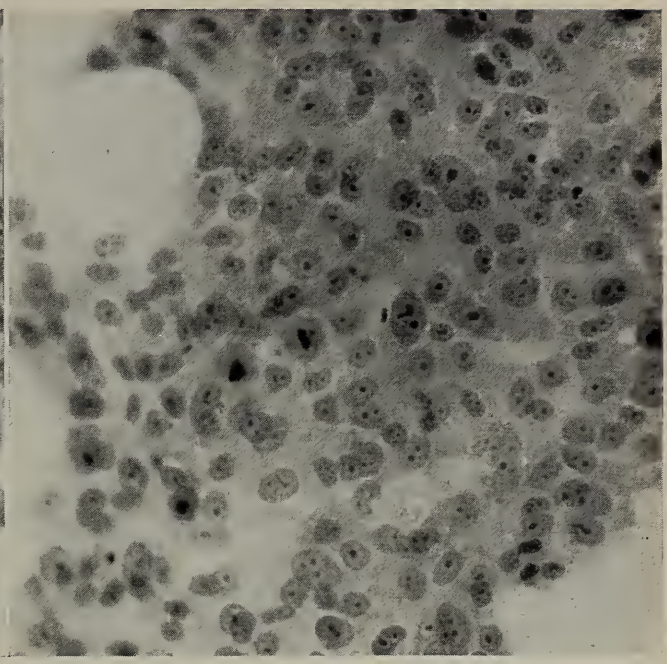


Fig. 6. Detroit-56A cells. 280X

TABLE I. HISTORIES OF DETROIT STRAINS OF EPITHELIUM-LIKE CELLS

Cell Type and Source*	Patient	Diagnosis	Biopsy	Date of Explant	Plaques**
Detroit—6 S.m.	WM58	Carcinoma of lung	Mass in lung	9-28-54	51
—30A A.f.	NF43	Carcinoma of breast; Carcinomatous ascites	Mass in breast; Malignant cells in ascitic fluid	1-14-55	24
—32 S.m.	WF57	Carcinomatosis; primary site undetermined	Malignant cells in pleural fluid	2-17-55	65
—34 S.m.	WM65	Metastatic carcinoma of bone	Tumor of femur	3-10-55	51
—52 S.m.	WF64	Diabetes mellitus	None	6-1-55	57
—56A A.f.	WM50	Carcinomatosis; primary site undetermined	Malignant cells in ascitic fluid	6-15-55	55

*S.m.—Sternal marrow; A.f.—Ascitic fluid.
**Day of cultivation when plaques first appeared in cultures.

such cells rather than their morphologic appearances alone.[7] This fact has become evident from our observations of three cultures of special importance. One of these cultures from which the Detroit-52 strain was isolated has developed from the sternal bone marrow of a patient with diabetes mellitus in whom there is no present evidence of malignant disease. Another, the Detroit-116P strain, was developed from the pleural fluid of a patient with lymphosarcoma. The pleural fluid contained lymphocytes and lymphoblasts but epithelial cells were not present. Recently, we have isolated an additional epithelium-like strain (Detroit-98) from the marrow of another individual without evidence of malignant disease after very thorough investigation. These two strains which developed from apparently non-carcinomatous sources will be described in detail elsewhere. The fact that all the Detroit strains are epithelium-like raises serious questions on the validity of identifying epithelium in tissue cultures from bone marrow, pleural or ascitic fluids, although the usefulness of such human cell strains for certain types of research is not impaired.

Present indications are that bone marrow, ascitic and pleural fluids may become useful sources for the development of stable cell strains of human cells.

Summary and Conclusions

One stable strain (Detroit-6), five additional newly established strains (Detroit-30A, -32, -34, -52, -56A) of polygonal cells which grow in sheets on glass surfaces have been isolated from human bone marrow and ascitic fluids. Their morphologic and growth characteristics are similar to those of epithelial cells. Although five of the strains have been developed from marrow or ascitic cells of patients known to have carcinomatosis, the malig-

(Continued on Page 295)

A Modern Theory of Blood Clotting

By Walter H. Seegers, Ph.D., Sc.D.
Detroit, Michigan

THE clotting of blood is an exceedingly complex phenomenon of great importance to our health. It consists of a large number of chemical interactions and there has always been a desire to describe these in detail. With the required information being only partially available, theories have been used to great advantage. Even now, with the extensive information on record, I find it useful to consider the chemical events in the clotting of blood in connection with some speculation. When new information becomes well established, it does not represent a dry fact alone, but also raises new questions not considered before. One looks at the field from a higher level, formulates new working hypothesis, and collects more information for nourishing the mind. Our view thus becomes more comprehensive, more practical, more useful, and more wonderful with our continuing attention to this aspect of our physiology. What I have written below constitutes an attempt to be accurate and conservative, but it is also to be regarded as theoretical.

The great discoveries in recent years have developed the field unevenly. There seems to be far greater information of an advanced nature; for example, about the conversion of fibrinogen to fibrin, the activation of prothrombin, the inactivation of thrombin, than there is about the inhibition of prothrombin activation, the relation of blood clotting to the physiology of hemostasis, or the mechanisms whereby clots are dissolved. The underdeveloped areas of our knowledge are logically the research opportunities for the immediate future, and it is easy to see how growth in those directions can be facilitated by applying the knowledge gained so recently.

First, a broad survey of concepts may be considered with the use of the diagram in Figure 1. For its interpretation the chemistry of blood coagulation is considered to be divided into four main concepts.

From the Department of Physiology and Pharmacology, Wayne University, College of Medicine. This investigation was supported by a research grant from the Michigan Heart Association.

1. Prothrombin activates itself to thrombin by means of activators such as, calcium ions, thromboplastin, Ac-globulin, platelet derivatives, platelet cofactor I, autoprothrombin, autothrombin II and other activators.

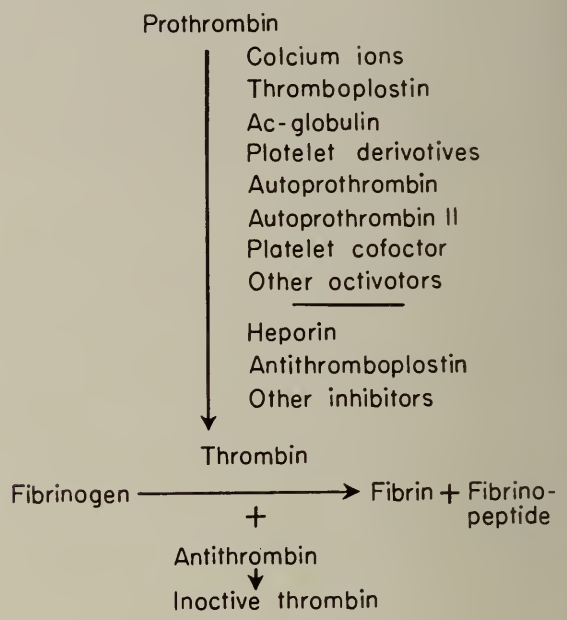


Fig. 1.

2. Prothrombin activation may be inhibited. This may occur in terms of agents that remove calcium ions, antithrombin, antithromboplastin which can neutralize thromboplastin and perhaps other activators, heparin and its cofactor, and other inhibitors.

3. Fibrinogen activates itself with thrombin. This produces the fibrin clot which is seen. There are by-products of this chemical reaction and with the aid of platelet derivatives and a plasma factor, the clot eventually retracts and serum is expressed.

4. Thrombin activity is neutralized. Apparently, this occurs mostly on the basis of interaction with antithrombin, although a certain amount is also neutralized by adsorption on fibrin. Thrombin activity may be interfered with by heparin and its plasma cofactor.

Activation of Prothrombin

It appears that it was generally believed that the activation of prothrombin consisted only of its transformation to thrombin. This idea is now inadequate, for it is known that *prothrombin can undergo multiple transformations.* Prothrombin gives rise to autoprothrombin, an accelerator that functions with thromboplastin, and to autoprothrombin II, an accelerator which functions with the platelets. Before considering the transformation of prothrombin to these derivatives, we may look at the meaning of the word prothrombin. For about seventy years, the word had reference to a hypothetical substance in plasma which somehow was supposed to contribute to a chemical mechanism that clotted fibrinogen. This hypothetical substance has now been purified and is known to have a molecular weight of 62,700, is composed of at least eighteen amino acids, contains glucosamine and a polysaccharide in which the repeating unit is glucose. When a preparation of purified prothrombin is placed in a 25 per cent sodium citrate solution, thrombin activity develops. That means that the solution acquires the minimum properties of thrombin; namely, the property of activating fibrinogen. Thus, prothrombin is a molecular entity that can by itself transform to thrombin in certain concentrated salt solutions.

The activation of prothrombin to yield autoprothrombin requires calcium ions, Ac-globulin and platelet factor 3. This combination of activators contains two that are ordinarily found in the plasma, and a third one found in the platelet compartment which is anatomically separated from the plasma. To the extent that platelets might disintegrate and have the elements of their composition appear in plasma, the latter could have all of the requirements for the transformation of prothrombin to autoprothrombin. Although autoprothrombin is derived from prothrombin, it does not become thrombin, but instead is functional in the activation of other prothrombin molecules to thrombin, and it does so in terms of functioning with thromboplastin. The equation for the development of autoprothrombin activity may be written as follows:

$$\text{Prothrombin} \xrightarrow[\text{Platelet factor 3}]{\text{Ca}^{++},\ \text{Ac-globulin}} \text{Autoprothrombin} \quad (1)$$

Prothrombin can also be transformed to autoprothrombin II, a reaction which occurs with small amounts of Ac-globulin and thrombin. Like autoprothrombin, this derivative of prothrombin also does not become thrombin but functions in the activation of prothrombin. However, instead of being a cofactor of thromboplastin, it is a cofactor of platelets, and more particularly a cofactor of platelet factor 3. An equation for the formation of autoprothrombin II activity is the following.

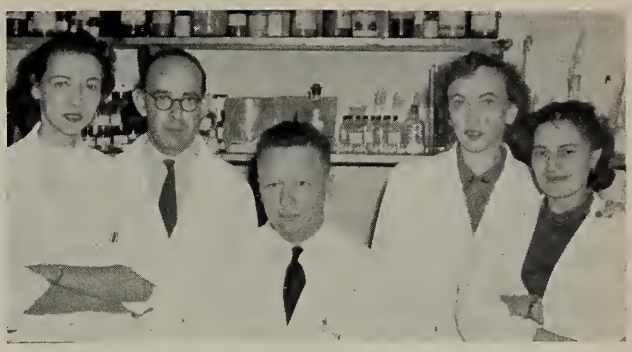


Fig. 2. Research work on the chemical nature of the blood clotting mechanisms has been pursued intensely in the Department of Physiology and Pharmacology for the past ten years. More than 100 technical papers have been published and outstanding scholars from foreign countries have come to help with the work. The above photograph represents the research group in 1954. From left to right: Shirley A. Johnson, research associate and graduate of the University of Toronto; Erwin Deutsch, Department of Medicine, University of Vienna; Walter H. Seegers, professor; Norma Alkjaersig, research associate and a graduate of the Polytechnic Institute, Denmark; and, Nevinka Ivanovic, faculty of School of Dentistry, University of Chile.

$$\text{Prothrombin} \xrightarrow[\text{Thrombin}]{\text{Ac-globulin}} \text{Autoprothrombin II} \quad (2)$$

The transformation of prothrombin to thrombin may occur in a large number of ways. Some of the combinations of materials that can be used in the laboratory are outlined by means of Table I. To have a successful combination, it must have certain essentials or the equivalent. These essentials are calcium ions, thromboplastin and Ac-globulin. These substances, or their equivalent, are found in three anatomic sites; namely, the plasma, the fixed tissues, and the platelets. Any two of these sources can be used for obtaining the essential biochemical preparations, but no single compartment alone contains them. If thromboplastin from the tissues is not available, a substitute can be found in the combination of platelet factor 3 and platelet cofactor I. The latter is found in plasma. The combination of platelet factor 3 and platelet cofactor I is called threone activity,

which distinguishes it from tissue thromboplastin. The equation representing threone is as follows:

Platelet Cofactor I + Platelet Factor 3 = Threone (3)

Plasma contains a protein found in trace quantities called Ac-globulin. This important plasma protein changes to an active form in the presence of a small amount of thrombin. Not only is plasma Ac-globulin activated, but thrombin, in sufficient quantity and in due course inactivates Ac-globulin. As a consequence of these changes in Ac-globulin, the serum of many species does not contain this activity. This function of thrombin may be represented as follows:

$$\text{Plasma Ac-globulin} \xrightarrow{\text{Thrombin}} \text{Serum Ac-globulin} \quad (4)$$

$$\text{Serum Ac-globulin} \xrightarrow{\text{Thrombin}} \text{Inactive Ac-globulin} \quad (5)$$

Of the several ways to activate prothrombin, two are perhaps most important when considered in terms their placed in a sequence of events and in terms of the quantity of prothrombin transformed. Those two ways are represented by equations.

$$\text{Prothrombin} \xrightarrow[\text{Ac-globulin}]{Ca^{++}\ \text{Thromboplastin}} \underset{\text{Autoprothrombin}}{\text{Thrombin}} \quad (6)$$

(Ca^{++}, Ac-globulin, Platelet Factor 3)

$$\text{Prothrombin} \xrightarrow[\text{Serum Ac-globulin}]{Ca^{++}\ \text{Threone}} \underset{\text{Autoprothrombin II}}{\text{Thrombin}} \quad (7)$$

(Thrombin)

In the first equation prothrombin becomes activated by means of thromboplastin, and Ac-globulin. A derivative of prothrombin, autoprothrombin, is an accelerator of the interactions. The type of Ac-globulin required in this equation is not specified for it may be serum Ac-globulin, platelet accelerator and perhaps plasma Ac-globulin itself may function directly with thromboplastin. The second equation represents activation with threone which is the equivalent of thromboplastin and in this instance serum Ac-globulin is required. The accelerator which is here effective is another derivative of prothrombin, autoprothrombin II. The latter is not effective under the conditions of equation 6 and contrariwise autoprothrombin is not effective under the conditions of equation 7. In equation 6, platelet factor 3 is considered to function in the formation of a prothrombin derivative; and in equation 7 in the transformation of prothrombin to thrombin.

TABLE I. MINIMUM REQUIREMENTS FOR RAPID ACTIVATION OF PURIFIED PROTHROMBIN

Activators	Source	Combinations for Rapid Activation				
Calcium ions	Plasma	+	+	+	+	+
Thromboplastin	Tissues	+	+			
Ac-globulin[1]	Plasma	+		+	+	+
Platelet accelerators[2]	Platelets		+			
Platelet factor 3[3]	Platelets			+	+	+
Platelet cofactor I[4]	Plasma			+		
Autoprothrombin II[5]	Plasma				+	

[1]Also called: proaccelarin (Owren); factor V (Owren); labile factor (Quick); prothrombin accelerator (Fantl); plasmatic cofactor of thromboplastin (Honorato); prothrombin A (Quick); prothrombinogenase (Owren); pro-prothrombinogenase (Owren); thrombogene (Nolf); plasma prothrombin conversion factor (Stefanini).

[3]Also called: Platelet-AcG (Ware-Fahey-Seegers); and citin (Marx).

[2]Also called: thrombozytenfaktor 4 (Baserga); Plättchenfaktor der Thrombokinase (Jürgens); thromboplastinogenase (Quick-Stefanini); thromboplastin cell component (Shinowara).

[4]Also called: antihemophilic globulin (Patek-Taylor); factor VII (Koller); antihemophilic factor (Brinkhous); antihemophilic globulin A (Cramer); plasma thromboplastic factor (Ratnoff); plasma thromboplastic factor A (Aggeller); platelet cofactor I (Johnson-Seegers); thromboplastinogen (Quick); thrombocytolysin (Brinkhous); thromboplastic plasma component (Shinowara); facteur antihémophilique A (Soulier); prothrombokinase (Feissly), plasmokinin (Laki); thrombokatalysin (Lenggenhager); antihemophilic factor (vanCreveld-Mastenbroek).

[5]Also called plasma thromboplastin component (Aggeler); factor IX (Koller); Christmas factor (Biggs-MacFarlane); platelet cofactor II (Johnson-Seegers); antihemophilic globulin B (Cramer); plasma thromboplastic factor B (Aggeler); plasma factor X (Shulman); facteur antihemophilique B (Soulier); plasma thromboplastic factor C (Aggeler).

Inhibition of Prothrombin

Mention has already been made of our meager knowledge of the inhibition of prothrombin activation. Consequently, only a restricted viewpoint can be developed. We can record that platelet cofactor I becomes inactivated during the clotting of blood. It very likely becomes conjugated with an inhibitor. Calcium ions and a small amount of thrombin facilitate this conjugation. There may be an unknown enzyme required for this purpose too, but until one is identified the equation may be represented as follows:

$$\begin{matrix}\text{Platelet} \\ \text{Cofactor I}\end{matrix} + \begin{matrix}\text{Lipid} \\ \text{Inhibitor}\end{matrix} \xrightarrow{\text{Thrombin}} \text{Cofactor I—Inhibitor (conjugate)} \quad (8)$$

It is also known that thromboplastin combines with an inhibitor in the presence of calcium ions.

When the activation of prothrombin is inhibited with heparin, a cofactor, found in plasma, is re-

quired; for, heparin alone is not sufficient to block the activation. Prothrombin escapes alteration by these mechanisms. The inhibition can be overcome by two mechanisms; namely, (a) removal of heparin with protamine, (b) excess Ac-globulin, or (c) excess thromboplastin. It seems likely that a complex forms which consists of the following:

$$\text{Heparin} + \text{Cofactor} + \text{Ac-globulin} \rightleftharpoons \text{Dissociable Complex} \quad (9)$$

This dissociable complex applies to equation 1 above. Whether it also applies to equation 2 is not known. Nor is there any information as to whether it may inhibit the formation of autoprothrombin or the formation of autoprothrombin II. These would all seem to be fruitful questions for further investigation. Heparin itself is destroyed by heparinase.

Activation of Fibrinogen

Thrombin may be regarded as an hydrolytic enzyme for which fibrinogen may be the substrate. The large long fibrinogen molecule loses a small quantity of its structure in the form of a polypeptide(s) which has been termed cofibrin and also fibrinopeptide. The activated fibrinogen polymerizes with its neighbor activated fibrinogen to yield large polymers in which the activated fibrinogen molecules are aligned in strands, end to end and with overlapping. Several such large strands associate side by side and with branching. The fibrin which forms in this manner is urea soluble whereas the fibrin form a normal clot is not urea soluble. Further investigations of the solubility characteristics of the fibrin clot obtained under physiological conditions as compared with fibrin obtained in the laboratory disclosed that calcium ions and a serum factor are concerned with the properties of the fibrin clot. Clots also retract and for that function platelets and a protein of the plasma are important. Finally, under artificial conditions one can demonstrate that the fibrin polymer may dissolve in the presence of a large amount of thrombin. However, the latter reaction perhaps seldom occurs for antithrombin destroys thrombin so rapidly that it has no chance to contribute to the resolution of the clot. The equations representing these ideas may be given as follows:

$$\text{Fibrinogen} \xrightarrow{\text{Thrombin}} \text{Activated Fibrinogen} + \text{Fibrinopeptide (Cofibrin)} \quad (10)$$

$$\text{Activated Fibrinogen} \xrightarrow{\text{Electrostatic Forces}} \text{Fibrin Clot (Urea Soluble)} \quad (11)$$

$$\text{Fibrin Clot} \xrightarrow{Ca^{++} + \text{Serum Factor}} \text{Ca-fibrin (Urea Insoluble)} \quad (12)$$

$$\text{Ca-fibrin} \xrightarrow{\text{Platelets, Other Factors}} \text{Retracted Clot} \quad (13)$$

$$\text{Ca-fibrin} \xrightarrow{\text{Thrombin}} \text{Decomposed Fibrin (Water Soluble)} \quad (14)$$

Antithrombin Mechanisms

Normally the prothrombin concentration of plasma is about 300 units per ml., and this means that the plasma prothrombin can give rise to 300 times as much thrombin as is required to clot 1 ml. of a standardized fibrinogen solution in fifteen seconds. Nevertheless, one finds in a short while after blood has clotted, that only a small percentage of this thrombin can be found. To account for this loss of thrombin, four antithrombin effects may be considered; namely, antithrombin-I, II, III and IV.

Antithrombin-I refers to the physical chemical adsorption of thrombin or fibrin. In laboratory demonstrations of this mechanism, it is possible to adsorb large amounts of thrombin. Furthermore, the quantitative data fulfill the requirements expected of adsorption phenomena, and the thrombin can be recovered from the fibrin. During the normal clotting of blood, however, only a very small amount of thrombin is involved with these mechanisms; for scarcely none can be obtained from the fibrin.

Antithrombin-II mechanisms are concerned with heparin and a cofactor found in plasma and serum. When heparin is added to plasma in suitable concentration, fibrogen does not activate itself with thrombin and fibrin clots may not form. Heparin alone, or the cofactor alone do not interfere with this process, but together they are powerful inhibitors; and Ac-globulin is antagonistic to the inhibition phenomena. Thrombin itself, considered as a molecular entity, apparently does not

change by means of antithrombin-II mechanisms. These ideas are expressed by the following equation:

$$\text{Fibrinogen} \xrightarrow{\text{Thrombin}} \| \text{ Heparin} + \text{Cofactor (Inhibitory Interference)} \quad (15)$$

The antithrombin-III mechanisms are concerned with the neutralization or inactivation of thrombin activity. Probably there is a direct combination between the plasma antithrombin factor and thrombin itself; for, thrombin and antithrombin activity disappear simultaneously. The equation may be represented as follows:

$$\text{Thrombin} + \text{Antithrombin} \rightarrow \text{Thrombin-Antithrombin Compound} \quad (16)$$

This mechanism can account for a large quantity of thrombin, being able to neutralize two or three times the potential thrombin which can be obtained from the plasma prothrombin sources. It is also a matter of interest that the antithrombin which operates in these mechanisms is very likely the same chemical substance which functions with heparin in the antithrombin-II reactions; that is, heparin cofactor and antithrombin are most likely one. But in the antithrombin-II reaction, as described immediately above by equation, heparin is not necessary and contrariwise may actually inhibit the formation of thrombin-antithrombin compound—at least to a certain extent.

Antithrombin-IV activity is closely related to prothrombin activation. It has not been established whether or not this antithrombin effect represents a distinct chemical entity or not. It represents the activity which can be demonstrated in plasma or serum after ether extraction has largely destroyed antithrombin-III. The concept of antithrombin-IV accounts for the more rapid disappearance of thrombin during the clotting of blood as compared with the rate of thrombin disappearance when the latter is prepared in the laboratory and added to plasma. It may be that the effects observed in antithrombin-IV studies can to a certain extent be accounted for on the basis of prothrombin being converted to non-thrombin derivatives of prothrombin.

Sequence of Events

A theoretical consideration of the important chemical mechanisms involved in blood coagulation would be incomplete without an attempt to outline a sequence of events. It was usually believed that thromboplastin is supplied from the transected cells adjoining the surface of a wound. It mixes with the blood as it flows over the surface of the wound and contact of the platelets with the tissue surface is followed by their breaking up and a series of chemical reactions follow. My concepts are in accord with these time-honored views. The following equations may be used to visualize a sequence of events, which is never without simultanous occurrences, whereby extravascular clotting occurs:

$$\text{Prothrombin} \xrightarrow{Ca^{++},\ \text{Thromboplastin},\ \text{Platelet accelerator}} \text{Thrombin (slow)} \quad (17)$$

$$\text{Prothrombin} \xrightarrow{Ca^{++},\ \text{Thromboplastin}} \text{Thrombin (slow)} \quad (18)$$

$$\text{Prothrombin} \xrightarrow{Ca^{++},\ \text{Thromboplastin},\ \text{Plasma Ac-globulin}} \text{Thrombin} \quad (19)$$

$$\text{Plasma Ac-globulin} \xrightarrow{\text{Thrombin}} \text{Serum Ac-globulin} \quad (20)$$

$$\text{Platelets} \xrightarrow{\text{Foreign Surfaces},\ \text{Thrombin}} \text{Platelet Materials} \quad (21)$$

$$\text{Prothrombin} \xrightarrow{Ca^{++},\ \text{Ac-globulin},\ \text{Platelet Factor 3}} \text{Autoprothrombin} \quad (22)$$

$$\text{Prothrombin} \xrightarrow{\text{Thrombin}} \text{Autoprothrombin II (a platelet cofactor)} \quad (23)$$

$$\text{Prothrombin} \xrightarrow{Ca^{++},\ \text{Serum Ac-globulin},\ \text{Platelet Cofactors},\ \text{Platelet Materials},\ \text{Thromboplastin},\ \text{Autoprothrombin},\ \text{Platelet Accelerator}} \text{Thrombin (rapid)} \quad (24)$$

$$\text{Platelet Cofactor I} + \text{Lipid Inhibitor} \xrightarrow{Ca^{++},\ \text{Thrombin}} \text{Cofactor I—Inhibitor (conjugate)} \quad (25)$$

$$\text{Fibrinogen} \xrightarrow{\text{Thrombin}} \text{Fibrin} + \text{Cofibrin} \quad (26)$$

$$\text{Thrombin} + \text{Antithrombin} \rightarrow \text{Thrombin-Antithrombin Compound} \quad (27)$$

It is possible to draw blood from a vein so carefully that no thromboplastin becomes mixed with

it. Nevertheless this blood also clots, and we must consider the initiation of a series of chemical events without thromboplastin. If such occurrences are possible then we must admit that intravascular blood coagulation is possible without trauma or other means whereby thromboplastin gains entrance to the vascular spaces. Our attention immediately focuses on the platelets, for if they are also removed from the plasma, as for example by centrifugation in siliconed glassware, the clotting mechanisms remain more or less static. The main question to take into consideration would be the mechanisms whereby we can get the first small amounts of platelet materials. Here I have nothing to offer beyond pure speculation along the lines of electrostatic phenomena, rough blood vessel walls, platelet agglutination, et cetera, and I shall go directly to a consideration of what might happen *without* thromboplastin of tissue origin *if* we have platelet materials. I think the most critical need is a means for converting plasma Ac-globulin to serum Ac-globulin with thrombin, and this thrombin may arise when prothrombin, platelet factor 3, plasma Ac-globulin and calcium ions yield autoprothrombin and a small amount of thrombin. Then, a whole series of reactions can be given in the following sequence of events wherein there are also simultaneous occurrences:

$$\text{Prothrombin} \xrightarrow[\text{Plasma Ac-globulin}]{\text{Ca}^{++},\ \text{Platelet Factor 3}} \text{Thrombin} + \text{Autoprothrombin} \quad (28)$$

$$\text{Plasma Ac-globulin} \xrightarrow{\text{Thrombin}} \text{Serum Ac-globulin} \quad (29)$$

$$\text{Prothrombin} \xrightarrow[\text{Serum Ac-globulin, Platelet Factor 3, Platelet Cofactors}]{\text{Ca}^{++}} \text{Thrombin (rapidly)} \quad (30)$$

$$\text{Platelet Cofactor I} + \text{Lipid Inhibitor} \xrightarrow[\text{Thrombin}]{\text{Ca}^{++}} \text{Cofactor I—Inhibitor (conjugate)} \quad (31)$$

$$\text{Fibrinogen} \xrightarrow{\text{Thrombin}} \text{Fibrin} + \text{Cofibrin} \quad (32)$$

$$\text{Thrombin} + \text{Antithrombin} \longrightarrow \text{Thrombin-Antithrombin Compound} \quad (33)$$

By assuming that platelet materials can become available, we can thus account for the formation of intravascular clots without the intervention of thromboplastin of tissue origin. It is of course conceivable that thromboplastin itself can gain access to the blood vessels and contribute to thrombosing tendencies. This could occur following trauma or lesions of the blood vessels or by mechanisms that have not been described. Extensive laboratory information to support the view that prothrombin may be activated in many different ways, opens the possibility for other mechanisms to operate within the blood vessels themselves. It may be that such substances as lipid materials, trypsin, or some enzymes, of which we are not aware, may eventually be found to play a role.

One of the encouraging facts is the health significance of the rapidly growing knowledge of the blood clotting mechanisms. If this accelerated progress continues, we can reasonably expect to be able to deal far more effectively with the hemorrhagic diseases and thrombosing tendencies than formerly. The main impedance to the continuous flow of much needed new knowledge seems to be the energy required to do the research. To understand this intricate pattern of protein, fat, and ionic interactions is now in the realm of possibility. We now see before us specific chemical and metabolic problems that can be worked out.

GRANT FOR VIRUS RESEARCH

The National Foundation for Infantile Paralysis has announced a grant of $286,944 in March of Dimes funds for virus research at the University of Michigan.

Foundation Head Basil O'Connor said the Michigan grant would support "somewhat hopeful" studies toward a drug preventive for polio and the seemingly "outsider chance" that a drug may be found to treat the disease.

The grant was among thirty-five, for a total of $1,943,887 announced for virus research, improved respirator center procedures and treatment of polio aftereffects.—*United Press Release,* Feb. 17, 1956.

The Value of Hormone Therapy in the Rheumatic Diseases

By Alfred Jay Bollet, M.D.
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THE anti-inflammatory hormones, corticotropin (ACTH), cortisone and hydrocortisone have been available for clinical study for about six years, and the newer steroids, prednisone and prednisolone, for over one year. The effectiveness of these agents in the management of the rheumatic diseases has been carefully studied, and it is now possible to consider in detail the manifestations of these diseases which are affected beneficially, those which are not influenced, and the dangers associated with this form of therapy. This subject will be discussed briefly, using these facts to arrive at an appraisal of the clinical value of hormone therapy of these diseases.

Rheumatoid Arthritis

Statement of Problem.—Within a short time of the discovery of the effect of cortisone on rheumatoid arthritis it became apparent that the hormone did not terminate the activity of the disease process inasmuch as inflammation usually returned as soon as the drug was stopped or the dose was sufficiently lowered. Hormone therapy would still be of great value if maintenance doses could control all of the manifestations of the disease as long as the drug was administered. Unfortunately, as will be discussed, it does not.

In general, there are three types of problems in the therapy of rheumatoid arthritis. First is the relief of pain and discomfort. Pain due to active inflammations of sensitive tissues can be ameliorated by anti-inflammatory agents, whereas pain due to the contact of irregular, distorted joint surfaces can be improved only by rest, analgesics and diminished weight-bearing. The second main objective of prolonged therapy is the prevention of the deformities which frequently develop in this disease, due in part to muscular and ligamentous contractures, and in part to cartilage and bone destruction. Physical measures are of considerable value in preventing or relieving the soft tissue changes, but we must look to pharmacologic agents to influence the progression of the bone and cartilage destruction. The third objective of treatment of rheumatoid arthritis is to increase functional capacity. Incapacity due to inflammatory changes and pain should be helped by drug therapy, but it is unlikely that such treatment can influence disability due to prior destructive changes or soft-tissue contractures. Physical and orthopedic measures can be of great benefit to patients with this type of disability but are not the subject of the present article.

What Hormone Therapy Can Accomplish.—Suppression of inflammation is the main effect of these hormones, which are the most powerful antiphlogistics at present available. The objective manifestations of joint inflammation, such as tenderness, swelling, redness and warmth of articular structures, usually improve dramatically within a few days of starting adequate doses of any of these hormones.[1-3] Pain is usually relieved rapidly. Synovial thickening and joint effusions subside. Biopsies of synovial membrane demonstrate histologically the improvement which can be appreciated clinically.[1,3] The "acute phase reactants," including the sedimentation rate, C-reactive protein and mucoprotein determinations, reflect the suppression of the inflammation. Systemic manifestations of the inflammatory process, such as malaise, anorexia, weight loss and fever, also improve. In many cases, unfortunately, these effects are incomplete or inadequate in doses which are safe enough for prolonged use, and in other patients a gradual return of symptoms occurs despite continuance of hormone therapy.

Another result of the suppression of inflammation is relief of the spasm of muscles about inflamed joints which is characteristic of acute rheumatoid arthritis. Considerable disability and even deformity may be due to these muscle changes, which can lead to atrophy or contracture. These changes may be avoided by the use of potent anti-

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inflammatory agents such as the steroid hormones, especially when the relief they afford allows the patient to cooperate with an appropriate plan of physical therapy.

Other manifestations of rheumatoid arthritis which may be beneficially affected by hormone therapy include an acute hemolytic anemia which is occasionally present and the ocular pathology which may be associated with this disease.

What Hormone Therapy Cannot Accomplish.—Several observations made during long-term cortisone therapy of rheumatoid arthritis suggest that the basic disease process does not seem to be influenced by hormone therapy in doses which are practical for long-term administration.[2,5,9] First, new joints can become involved by the disease while the patient is receiving apparently adequate doses of steroid.[2] Second is the appearance of subcutaneous nodules during therapy. These lesions consist of necrotizing granulomas, which are the pathologic lesions characteristic of rheumatoid arthritis; these lesions have been found in synovial membrane, in fibrous tissue filling defects in cartilage and bone of involved joints, in the pericardium, myocardium, aorta, lungs, pleura, dura, skeletal muscles, and in the walls of arteries. During early studies of the effect of steroids it was felt that subcutaneous nodules resolved more rapidly or stopped increasing during steroid therapy.[1] Further observation has revealed that these nodules can persist unchanged or, more significantly, can appear during steroid therapy, indicating that a basic pathological process is continuing. This observation has been made in patients receiving long-term cortisone therapy[2] and more recently during prednisone therapy.[4] Finally, destruction of cartilage and bone in involved joints has been observed to progress in patients clinically doing well on hormone therapy. These observations were first made in patients treated with cortisone,[2,5] and the same observations have now been made in a series of patients with rheumatoid arthritis being treated with prednisone and prednisolone.[6] The occurrence of these phenomena indicates that the basic disease process is continuing despite therapy. A cooperative British study[9] found no significant difference between aspirin- and cortisone-treated patients with early rheumatoid arthritis after a period of two years of therapy, lending further support to the concept that hormone therapy does not significantly alter the basic disease process.

Dangers of Hormone Therapy.—The side effects of the anti-inflammatory hormones are too well known to warrant detailed discussion, but it is important to stress those toxic effects which occur most frequently during hormone therapy of patients with rheumatoid arthritis.

The administration of cortisone or prednisone results in a suppression of the output of corticotropin by the pituitary with resultant adrenal atrophy. Adrenal insufficiency may then occur if a stress situation arises and additional exogenous corticoid is not given to the patient. Episodes of adrenal insufficiency have been reported as long as six months after the cessation of cortisone therapy and deaths have occurred on this basis.[1]

Peptic ulcers have been noted to appear within a few weeks of therapy in patients with previously negative gastro-intestinal x-rays,[7] and there appears to be a definite association between the appearance of peptic ulcers and hormone therapy, despite the fact that peptic ulcers did seem to occur with increased frequency in patients with rheumatoid arthritis before steroid therapy was available. In addition, the clinical manifestations of the ulcer may be modified by these drugs and in a number of cases the first indication of the ulcer has been a sudden perforation or hemorrhage.

Mental changes may also occur during therapy with any of these agents, and serious psychoses may result. Aggravation of the negative nitrogen balance frequently present in patients with rheumatoid arthritis occurs during therapy with all of these agents, and resulting osteoporosis occasionally leads to compression fractures of vertebrae. Diminished carbohydrate tolerance has also been observed with all of the anti-inflammatory hormones,[1,7] but it is rarely necessary to discontinue therapy for this reason. Salt and water retention and potassium loss occur with corticotropin, cortisone and hydrocortisone and may give rise to clinical problems, especially in patients with heart failure. These electrolyte changes do not occur with therapeutic doses of prednisone and prednisolone.[3]

The reported incidence of side effects from prolonged therapy varies from 20 to 100 per cent, depending on the dosage used. Several observers have stressed that the incidence of side effects when the daily dose of cortisone is 75 mg. or more is three times as great as it is in patients taking less than 75 mg. per day.[1] Termination of hormone therapy because of serious toxicity has been

necessary in approximately 10% of patients during prolonged therapy.[1]

In addition to these toxic effects there is suggestive evidence that prolonged hormone therapy adversely affects the mesenchymal tissues, giving rise to an illness resembling lupus erythematosus when withdrawal is attempted.[8] The exact significance of these observations remains to be established.

Use of Hormone Therapy in Rheumatoid Arthritis.—It becomes possible to arrive at a rational program for the use of these drugs in rheumatoid arthritis when all of the above facts are taken into consideration. To recapitulate briefly this includes: (1) the beneficial effects—primarily the suppression of inflammation, (2) the fact that therapy must be continuous since these agents do not induce a remission, (3) the fact that the progression of the basic disease process is not arrested, and (4) the risk of side effects especially with prolonged administration of hormones. It must be added that hormones should not be used without a careful consideration of possible contraindications. In addition, such therapy should never be started unless simpler, less dangerous measures have been tried without success and the hormones should be used in the smallest possible doses. In view of the limitations of the effectiveness of these agents, the risk of toxicity is worth taking only in specific instances in which the possible gain outweighs the risk. A few examples of such instances would be: First, patients who are in great distress because of reversible joint inflammation who have not responded to less toxic measures. Relief of pain in such a patient may be worth the risk of toxicity, or a rapid increase in functional capacity may be necessary for financial or emotional reasons. Secondly, patients who can benefit from carefully-planned physiotherapy, but who require the temporary use of a potent anti-inflammatory agent to facilitate the physiotherapy. Thirdly, patients with severe systemic manifestations of the illness, such as high fever, malaise, weight loss, a pronounced hemolytic anemia, or severe ocular lesions. Intra-articular hydrocortisone or prednisolone are very effective adjuvant measures without any risk of systemic toxicity, but are of value only in patients with involvement of few joints who will accept repeated injections.

Prolonged oral or parenteral administration of hormones should be restricted to patients with rheumatoid arthritis in whom a satisfactory response can be attained with a dosage low enough to be relatively safe.

Systemic Lupus Erythematosus

Statement of Problem.—Systemic lupus erythematosus is frequently diagnosed during a period of acute illness characterized by high fever and general toxicity, with one or more of the visceral manifestations of the disease. If the patient survives this acute toxic episode, the disease may be quiescent for long periods, there may be further acute toxic episodes or secondary infections, or the basic process may progress in one or more of the viscera affected by the disease. Involvement of the kidneys is particularly notable and progressive renal disease with hypertension and azotemia is becoming more and more common as the final manifestation of systemic lupus. Therapy, therefore, is concerned partly with the control of these acute toxic episodes and partly with management of the visceral involvement.

What Hormone Therapy Can Do.—The acute toxic episodes of activity of the lupus can be controlled by hormone therapy. Since these episodes can be fatal if not controlled, the risk of side effects of therapy is certainly worth taking, even when extremely large doses of hormones are needed. Fortunately, this disease is characterized by wide fluctuations in severity and it is usually possible to reduce the dose within a short time. Occasionally large maintenance doses are needed to control these manifestations of the disease, but it is necessary to accept the risk of serious side effects of the hormones in this situation. In addition to the systemic toxic effects of the disease which are well controlled by hormones, many of the individual visceral manifestations are benefited; examples include the skin and mucous membrane lesions, joint pains and objective joint findings, pulmonary and pleural changes, pericarditis and peritonitis. The hematologic changes observed in many cases of lupus, including leukopenia, hemolytic anemia and thrombocytopenia, frequently respond satisfactorily to hormone therapy.[10,11]

What Hormone Therapy Cannot Do.—Several of the visceral manifestations of systemic lupus erythematosus respond poorly, if at all, to hormone therapy. The most important of these is the kidney involvement. Improvement in proteinuria,

hematuria or azotemia during therapy has been observed in some patients, but this usually correlates with improvement in such extra-renal factors as fever and dehydration.[10,11] Although there have been some reports of diminution in proteinuria and increase of renal excretory capacity with cortisone therapy,[10] this has not been the usual experience and a careful study of daily protein excretion and clinical renal function tests during prednisone and prednisolone therapy failed to show any benefit in patients who were not febrile or dehydrated at the start of therapy.[11]

Other visceral manifestations of lupus which do not usually respond satisfactorily to hormone therapy are the cardiovascular and central nervous system changes. Although pericarditis and myocarditis do occasionally seem to respond to therapy,[10] more often they do not.[10,11] Cardiomegaly and electrocardiographic changes seem to be particularly resistant to therapy.[11] Sodium and water retention induced by corticotropin or cortisone can aggravate the clinical situation in patients with a tendency to fluid retention due to cardiac or renal disease.

While convulsions and psychoses may occur as a result of the central nervous system involvement by lupus erythematosus, they may also result from hormone toxicity. In some patients in whom these serious manifestations of the disease have appeared before hormone therapy was begun, improvement has been noted with this form of treatment; in other patients the CNS changes have appeared or become worse during therapy. Certainly the effectiveness of these agents in controlling the CNS manifestations of lupus is far less satisfactory than their effectiveness in controlling the acute toxic manifestations of the disease, and occasionally the clinical situation can be made worse by their use.

The protein abnormalities noted in the serum of patients with lupus erythematosus also fail to respond to hormone therapy. The frequently present hypoalbuminemia usually improves slightly, but does not return to normal levels; the increase of the serum globulin is corrected more often. The elevation of the sedimentation rate is usually incompletely corrected, although the C-reactive protein almost always disappears under the influence of corticoid therapy. The false-positive serological tests for syphilis are not altered and, perhaps most important of all, the LE phenomenon is not abolished by hormone therapy.[10,11]

Dangers of Hormone Therapy.—All side effects of these drugs which have been discussed in connection with rheumatoid arthritis may occur in patients with lupus erythematosus. In addition, as has been mentioned, there is greater danger from fluid retention during the administration of those hormones which cause diminished sodium excretion in patients with lupus involvement of the heart or kidneys.[11] The central nervous system toxicity of these agents also can be an extremely perplexing problem in patients with this disease.

Use of Hormone Therapy in Lupus Erythematosus.—In patients with life-threatening febrile toxic exacerbations of this disease, these hormones can be life saving and the risk of the side effects of even very large doses is certainly worth taking. The dose should be kept as low as the safety and comfort of the patient will allow with constant awareness that the activity of the disease and consequent need for hormones fluctuates frequently. Visceral manifestations of the disease should be treated cautiously in an attempt to avoid those side effects of the drug which can aggravate the clinical situation. If large doses of these drugs do not show evidence of benefiting the patient within a reasonable trial period, it is best to lower the dosage as much as possible to avoid these side effects. The evidence is reasonably conclusive that the renal lesions of systemic lupus erythematosus are not improved by hormone therapy and here the risk of toxicity outweighs the possibility of benefit. Prednisone and prednisolone seem to have advantages over the older hormones in the management of some patients with lupus erythematosus because of the lack of sodium and water retention in therapeutic doses.[11]

Rheumatic Fever

Statement of Problem.—The arthritis of rheumatic fever is a benign process which responds readily to salicylate therapy. Rheumatic heart disease results from attacks of inflammation in the heart valves and myocardium which lead to fibrosis and scarring and this is the real problem in this disease. It seems reasonable to believe that effective suppression of the inflammatory process, begun sufficiently early and continued for a sufficient time in a self-limited attack, will diminish the resulting fibrosis. The subcutaneous nodules which occur in rheumatic fever have pathological changes which resemble the cardiac lesions and it

is an interesting clinical observation that patients who develop subcutaneous nodules rarely escape significant cardiac involvement.[12] In contrast to the lack of influence of hormone therapy on the subcutaneous nodules of rheumatoid arthritis, Massell[12] has noted that the subcutaneous nodules of rheumatic fever recede faster and no new nodules appear once hormone therapy is begun. This observation and the fact that steroids inhibit proliferation of fibroblasts experimentally suggest that hormones may minimize the myocardial and valvular fibrosis resulting from rheumatic fever.

Effect of Hormones on Rheumatic Carditis.—In the dosage employed in early studies the hormones were not found to have significant advantages over aspirin in the treatment of rheumatic carditis. With the use of much larger doses over longer periods of time, a series of patients studied by Massell[12] showed complete disappearance of murmurs twice as often as in a comparable group treated with smaller doses over shorter periods. It was also noted that the earlier treatment was begun with either schedule, the better were the results obtained.

Space limitations do not permit a more exhaustive discussion of all the controversy concerning the effect of the hormones in rheumatic carditis.

Use of Hormones in Rheumatic Carditis.—As a result of Massell's observations and similar reports by other investigators, it is now recommended[12] that large doses of hormones be used in the management of all cases of rheumatic carditis. For example, cortisone is given in a daily dose of 300 mg. for at least three weeks, after which the daily dose is gradually lowered over an additional nine-week period. Other clinicians are using the initial 300 mg. daily dose for six weeks with a minimum of nine to twelve weeks of therapy being given. Comparable doses of prednisone are being used, and these drugs seem to be preferable in those patients in whom sodium and water retention would be deleterious. Long-term follow-up of the prednisone-treated series is not yet available, however, to establish the proper dosage and to compare the toxicity of this drug to that of similarly effective doses of cortisone. In general, the side effects of hormones have not outweighed their beneficial effects in the treatment of rheumatic fever, even at these high dosages.

Other Rheumatic or "Collagen" Diseases

The results of therapy of the other rheumatic or "collagen" diseases, such as periarteritis nodosa and scleroderma, have not been very encouraging in most instances. Systemic toxicity, fever, general well-being and joint symptoms are often improved, but in most instances the basic disease process does not seem to be affected. Some cases of periarteritis respond quite satisfactorily[13] and trial of large doses of hormone therapy often seems warranted. The skin changes of scleroderma occasionally show some improvement, especially in the earlier, more edematous phases.[14] Improvement is usually not striking, however, and visceral changes are little influenced by the hormones. In addition, because of the surprisingly frequent cardiac and renal involvement by this disease, there is often considerable danger attached to the use of sodium- and water-retaining agents. Hormone therapy of scleroderma must therefore be cautiously and not too hopefully undertaken. The skin and muscle changes of dermatomyositis often respond satisfactorily to hormone therapy, and improvement can frequently be maintained by prolonged therapy in those patients who do not have an underlying neoplasm. The improvement in the strength of seriously weakened muscles may justify accepting the risk of toxicity of relatively large doses of hormones in patients with dermatomyositis.

Summary

Experience has shown that hormone therapy is often of great value in the various rheumatic diseases, but it is not curative, nor can it arrest the progression of the basic disease process. Its value in rheumatoid arthritis is greatest in patients with predominantly inflammatory disease, who respond satisfactorily to doses low enough to be safe for prolonged use, although larger doses may rarely be used temporarily for special indications. The fact that the basic disease process seems to progress despite hormone therapy makes it unwise to subject most patients to the risk of serious toxicity. In contrast, hormone therapy may be lifesaving in patients with other diseases of this group, most notably lupus erythematosus, and the risk of toxicity of even very large doses is well worth taking. This is true for some of the manifestations of these diseases, while others are not favorably influenced by hormones. Since the clinical situation can often be seriously aggravated by

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Review of Pathophysiology and Treatment of Shock Accompanying Myocardial Infarction

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SHOCK accompanying myocardial infarction is an acute medical emergency which occurs in approximately 10 per cent of all cases of infarction of the heart. While the total over-all mortality of acute myocardial infarction is 21 per cent, when shock occurs as a complicating factor the mortality increases to 80 per cent.[1] New agents introduced in recent years in the treatment of shock have reduced this mortality rate significantly. This is particularly true when treatment is instituted within the first three hours of the shock state, as was well pointed out by Griffith et al,[2] who showed that of 134 patients treated for shock by various means, sixty who received treatment within three hours had a mortality rate of only 13 per cent; the remaining seventy-four patients, who were similarly treated after three hours had elapsed, had a mortality rate of 76 per cent. The purpose of this paper is to discuss the important factors in the pathophysiology of shock accompanying myocardial infarction, and to review the most satisfactory methods now available in restoring myocardial function to an optimum state.

Definition

The clinical syndrome of shock is well known to all physicians, but for purposes of this discussion, shock is considered to be present when, in a previously normotensive patient, the systolic pressure is 80 mm. Hg or below, accompanied by the signs of circulatory collapse such as cyanosis; cold, clammy, moist skin; rapid, thready pulse; and narrowed pulse pressure. In patients with pre-existing hypertension, the clinical syndrome of shock may be present when the systolic pressure is 100 mm. Hg or even higher, depending on the degree of hypertension existing previously.

Pathophysiology

Although numerous theories and concepts have been expounded, the precise sequence of pathophysiological events leading to shock following myocardial infarction is not clear. Loss of plasma into the infarcted muscle, or release of a histamine-like or other toxic substance liberated by traumatized or ischemic tissue does not appear to be adequate to explain the shock accompanying myocardial infarction.[3,4] A slight decrease in plasma volume and hemoconcentration has been observed in some patients with myocardial infarction in shock thought to be due to fluid loss into the lungs as a result of pulmonary congestion[5] and/or sweating or vomiting. However, in the majority of patients, the circulating blood volume is not significantly decreased and certainly not to a sufficient extent to produce a state of shock.[3]

There is general agreement that the actual event leading to the shock state in patients with myocardial infarction is a reduction in left ventricular output due to direct loss of functioning myocardium. In studies on patients with severe myocardial infarction, Freis et al[6] found a reduction of cardiac output, stroke volume, an increase in total peripheral resistance, heart rate, central venous pressure, and essentially normal pulmonary and total blood volumes. He suggested that the initial change following extensive myocardial infarction is a reduction in stroke volume, followed by the later appearance of a fluid retention syndrome which, in the presence of a defective myocardium, results in congestive heart failure as well as an accentuation of the shock-like state.

Corday et al[7] have shown experimentally in dogs that there is a diminution of coronary blood flow in shock. In addition, these workers have shown

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This review represents in part material presented by Dr. Talmers at a regular Medical Seminar of the Department of Medicine.

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that following coronary artery ligation, the ischemic myocardium ceases to contract and balloons with each systole when the blood pressure is maintained at normal levels. If the blood pressure is lowered by bleeding, ballooning becomes more marked in spite of the lowered intraventricular systolic pressure, while restoring the blood pressure to normal by blood transfusion decreases the degree of ballooning and reduces the extent of the area of noncontracting myocardium. Where only partial constriction of the coronary artery was carried out, contractility of the involved myocardium remained normal as long as the blood pressure was maintained, but after the latter fell to shock levels, the involved myocardium ceased to contract and ballooning occurred. If the results of these experiments are applicable to humans, it is evident that maintenance of adequate blood pressure levels would be important in minimizing the extent of the myocardial injury. This is particularly true in the human subject with coronary artery disease where narrowing of adjacent collateral coronary arteries is practically always present, and where a barely adequate myocardial oxygen supply may be maintained even with a normal coronary perfusion pressure. Any significant fall in coronary perfusion pressure such as occurs in shock would extend the area of irreversible myocardial damage in these critical areas, and would tend to maintain and accentuate the shock state. As experimentally complete ischemia of the cardiac muscle cell for twenty-five to forty-five minutes produces irreversible myocardial damage with infarction,[8] emphasis need hardly be given to the necessity of immediately restoring the coronary perfusion pressure to optimum levels, if one expects to reduce significantly myocardial injury and mortality in patients with shock accompanying myocardial infarction. The same may be said for the prompt specific treatment of disturbance in cardiac rhythm, either supraventricular or ventricular tachycardia, as these arrhythmias may per se decrease coronary flow, lower the cardiac output and consequently secondarily accentuate the shock state. In the past, it has been the feeling of some physicians that hypotension associated with myocardial infarction should not be vigorously treated, as it was argued that it was a compensatory mechanism which salutarily decreased the work of the damaged heart,[9] and that restoration of blood pressure to normal would increase the incidence of myocardial rupture. From the previous discussion of the pathophysiology of myocardial infarction and shock, it is evident that there is no physiological reason for such a concept. Further, since rupture secondary to myocardial infarction usually occurs between the fourth and eleventh day[10] at the time when tissue necrosis has occurred, and shock usually develops in the first few hours or days, this complication of restoring blood pressure to normal has probably been exaggerated.

Treatment

In the management of the patient with shock complicating myocardial infarction, the cardinal principle in therapy is to accomplish a restoration of blood pressure as quickly as possible to levels that will provide optimum coronary blood flow, and will not at the same time excessively increase the work of the heart against pressure. The measures that are most satisfactory in accomplishing this are vasopressor agents and transfusion of blood or plasma. Adjuvant methods of treatment including oxygen, sedation, digitalis, and other general measures remain important additions in the therapy of shock, and will be discussed.

Vasopressor Drugs.—The introduction and use of vasopressor agents have been important adjuncts to therapy of shock. The ideal pressor drug would elevate blood pressure, maintain normal peripheral resistance, increase stroke output, produce a proportionate increase of coronary blood flow, not impair myocardial efficiency or produce serious arrhythmias. The agent which best satisfies these criteria is norepinephrine, which increases blood pressure, peripheral resistance, coronary blood flow, tends to slow the pulse and produces no significant increase in cardiac output. Unlike epinephrine, it does not produce anxiety, restlessness or apprehension. Encouraging results with its use in shock accompanying myocardial infarction have been reported, indicating a small but significant reduction in the high mortality of this condition.[11-14] In most of the cases reported, pulmonary edema or congestive failure was not produced or aggravated by norepinephrine, and in some cases improvement of congestive failure occurred attributable to an increase in heart contractile force.[12]

To administer norepinephrine (levophed bitartrate) one dilutes 4 cc. levophed in 1000 cc. 5 per cent glucose in water which yields a solution for intravenous administration containing 4 micro-

grams of norepinephrine per cubic centimeter. The rate of administration is determined by the pressor response, and frequent blood pressure determinations must be taken until the desired pressure is maintained. Increasing the concentration of the norepinephrine to 8 micrograms/cc. and even to 16 micrograms/cc. may have to be resorted to at times for the desired blood pressure response. An increase in blood pressure can usually be expected immediately, and on premature withdrawal, the fall in pressure is also rapid. In the use of norepinephrine, emphasis should be placed on the necessity of titrating the patient's blood pressure, and to continue to increase the concentration of the drug and/or the rate of administration until a satisfactory response is obtained. However, those patients who do not respond to concentrations of 16 micrograms/cc. given at the rate of 40 to 50 drops/minute usually prove to be unresponsive. Cortisone has been used in an attempt to restore vascular reactivity to norepinephrine, but with disappointing results, Griffith et al noting only a questionable result in one of twelve patients.[2] In patients not responding to norepinephrine, the addition of blood or plasma is indicated in an attempt to restore blood pressure to normal. After the patient is out of shock and blood pressure appears to be maintained, gradual withdrawal of the drug is indicated, checking carefully to see that blood pressure does not return to shock levels. Patients have been known to be on norepinephrine for over a week before the blood pressure could be maintained by itself, although usually withdrawal can be accomplished within twenty-four hours. Care must be taken to avoid extravasation of the fluid outside the vein as intense local reactions followed by sloughing may occur.[11,15] This complication has developed when infiltration has occurred in the skin of the hand and foot, but rarely in the arm.[11] Also, sloughing along the course of the vein after satisfactory insertion of a polyethylene tube into the saphenous vein has been reported,[11] and has developed in one of our patients as well. Consequently, intravenous infusions of norepinephrine in the vein of the lower extremities had probably best be avoided if veins in the arms are available.

Other vasopressor agents have been reported and used with varying success, but have received only limited use at this hospital. Mephentermine, which can be given both intravenously and intramuscularly, has been used with some success.[1] Phenylephrine also has received clinical trial with varying success[16] and may be administered intramuscularly or intravenously in dilute solution. Other pressor drugs used which can be given both intravenously and intramuscularly include ephedrine sulfate[17] and paredrine.[18] More recently, encouraging results with metaraminol have been reported.[19]

Epinephrine, while used in the past for shock, has no advantage over norepinephrine and has possible disadvantages, in that it tends to cause a greater increase in cardiac output and work than norepinephrine, which might be detrimental to the patient with a damaged myocardium. Furthermore, there is experimental evidence that the myocardial epinephrine content is already high in patients with myocardial infarction[20] and that this increased concentration of epinephrine may be responsible for initiating the ventricular arrhythmias frequently seen in this condition, since adrenergic blocking drugs seem to be effective in treating arrhythmias in animals with experimental infarction.[21]

Transfusions.—Since the circulating blood volume is not decreased in patients with myocardial infarction in shock, the elevation of blood pressure following transfusions probably is due to increased blood volume and ventricular filling with consequently increased stroke output. Whether or not the transfusion is effective in restoring blood pressure is then fundamentally dependent on whether enough functioning myocardium remains to respond to Starling's law of the heart. In view of this, vasopressor agents appear to be a more physiological approach to the problem of shock accompanying myocardial infarction, however, blood and plasma transfusions have been used extensively with good results in some patients, particularly when given early.[22] The usual rate of administration has been 2 to 4 ml. per minute (average of 200 ml. per hour) with a range of 60 to 500 ml. per hour.[23] In the presence of anemia, blood is the treatment of choice, otherwise plasma is preferred. Before using transfusions in patients with myocardial infarction in shock, it is important to exclude the presence of pulmonary edema. Where such is present, it is usually indicative of an increase in pulmonary capillary and artery pressure secondary to an inability of the left ventricle to expel blood adequately. This alteration in pulmonary cir-

culatory dynamics contraindicates transfusion and if such were given, would likely increase the pulmonary capillary and left ventricular diastolic pressure further and might cause fatal pulmonary edema. However, in those cases in shock having mild left ventricular failure as evidenced by a few basilar râles, the judicious use of transfusion may be resorted to. The rate of administration is best controlled by a continuous recording of the venous pressure by a saline manometer connected through a three-way stopcock system to the transfusion needle, which allows for repeated and practically continuous determination of venous pressure. The transfusion of blood or plasma may usually be administered safely as long as the venous pressure remains at a constant level, but if during the infusion, it becomes elevated, the transfusion should be stopped, as a rise in pressure indicates an overload on the heart, and the production of hemodynamic failure. While in an exceptional case, large amounts of blood have been used to restore the blood pressure in a patient with myocardial infarction in shock,[24] in a patient showing any evidence of left ventricular failure, volumes greater than 500 cc. should be administered with caution, as amounts greater than this are usually not successful.

To avoid overloading the pulmonary circulation, intra-arterial blood transfusions have been used in shock accompanying myocardial infarction. The introduction of intra-arterial blood transfusions in the treatment of shock was based in large part on experimental work reported by Kohlstaedt and Page.[25] Utilizing dogs subjected to hemorrhagic hypotension, they reported superior results using intra-arterial blood transfusions as compared with the intravenous route, although the rate of administration was four times greater in the former. However, other work has shown that when the experimental conditions are comparable, including rate of replacement of blood volume, there is no superiority of the intra-arterial route over intravenous transfusion in restoring the blood pressure to normal.[26-28] Although some good results in shock accompanying myocardial infarction have been reported with the intra-arterial method,[29,30] there is no clear-cut evidence of its superiority over the intravenous route of administration, and is not recommended for routine use in treatment.

In those individuals with pulmonary edema, a bloodless phlebotomy, accomplished by the application of tourniquets to the extremities to reduce venous return, and/or venesection removing 250 to 500 cc. of blood rapidly may be indicated, in spite of the presence of shock. This acute reduction in venous return reduces the work load on the damaged left ventricle sufficiently in some cases to decrease left ventricular diastolic and pulmonary capillary pressure with relief of pulmonary edema. At the same time, such a reduction in load may occasionally, operating through Starling's law of the heart, increase left ventricular stroke output which would tend to improve secondarily the shock state. When failure is present, it is evident that digitalis by improving myocardial contractility would further enhance left ventricular output and lower pulmonary venous pressure, and therefore should be administered.

Digitalis.—Objections to the use of the digitalis glycosides in patients with infarction and failure have included the possibility of enhancing the incidence of cardiac rupture, and the danger of producing ventricular fibrillation by increasing ventricular irritability.[31,32] The latter objection cannot be overlooked entirely, although ventricular arrhythmias usually occur with excessive rather than with therapeutic amounts of digitalis. If only minimal signs of congestive failure are evident, a mercurial diuretic such as mercuhydrin or thiomerin may be all that is necessary. However, if pulmonary edema becomes progressive, then digitalization should be carried out. The usual digitalizing dose of lanatoside C, a rapidly acting digitalis glycoside whose action is dissipated in forty-eight to seventy-two hours, is 1.6 mg. and may be given slowly intravenously at one time. However, in patients with myocardial infarction and shock, we prefer to administer 0.8 mg. intravenously initially, and then give an additional 0.4 mg. via this same route in one to two hours if no effect is evident, repeating this latter dose in another one to two hours if necessary. If rapid intravenous digitalization with lanatoside C is used, then a longer acting digitalis preparation such as digitoxin or digitalis should be started within six to twelve hours, at a dosage that will accomplish complete redigitalization in the next twenty-four to forty-eight hours.

Oxygen.—Oxygen therapy is advisable in all patients in shock accompanying myocardial infarction, as such patients have a tissue hypoxia on the basis of a moderate reduction in arterial oxygen

saturation,[33] and this, combined with the diminished cardiac output, significantly reduces oxygen transport to the peripheral tissues. With high concentrations of inspired oxygen of 95 to 100 per cent, which can be delivered by a closed mask, arterial oxygen saturation will be restored to normal, and in addition approximately 2 volumes per cent of oxygen will be carried in physical solution in the plasma, instead of the usual 0.1 to 0.2 volumes per cent in physical solution present with the patient on ambient room air. This excess physically carried oxygen increases the blood-tissue gradient, and is therefore readily delivered to the hypoxic peripheral tissues existing in patients with shock. Lower inspired oxygen concentrations of 40 to 50 per cent such as can be delivered by either tent or nasopharyngeal catheter,[34] may replace the mask after the first few hours following satisfactory response of the shock to therapy.

Agents Used in Complicating Arrhythmias.—Tachycardia is a serious complication of myocardial infarction which should be treated promptly as it may initiate shock or contribute to its severity. Although clinical acumen may diagnose the type of tachycardia, the precise diagnosis is made with the electrocardiogram. The differentiation between an arrhythmia of supraventricular and ventricular origin becomes of paramount importance in treatment, as the proper treatment of one may be lethal for the other. In general, patients exhibiting a persistent rapid ventricular rate of supraventricular origin should be digitalized as previously discussed in an effort to slow the tachycardia, unless other measures such as carotid sinus pressure, sedation, et cetera, promptly eradicate the arrhythmia. On the other hand, ventricular tachycardia is a contraindication to the use of digitalis. This arrhythmia is best treated by the intravenous administration of procaine amide (pronestyl) at the rate of 50 to 100 mg. per minute until the rhythm is restored to normal, which in most instances will not require more than one gram, although occasionally higher dosages may have to be given. An electrocardiogram, using a direct writing machine, should be recorded almost continuously throughout the period of administration of this drug, so that the latter can be stopped when conversion of the abnormal rhythm has occurred. An alternate method, with which we have had little experience, is the intravenous use of 0.6 gram quinidine lactate or quinidine hydrochloride diluted in 300 cc. of 5 per cent glucose in water given over a twenty to thirty minute period, stopping this infusion when conversion of the arrhythmia has occurred. With restoration of normal rhythm, 0.5 gram pronestyl or 0.2 to 0.4 gram quinidine orally every four hours should be given to prevent recurrence.

Anticoagulants.—In an effort to prevent thrombotic complications, anticoagulants should be given to all patients with shock accompanying myocardial infarction unless a specific contraindication to anticoagulant therapy exists. Heparin plus a longer acting oral anticoagulant such as dicumarol is started simultaneously, the former drug being discontinued in forty-eight to seventy-two hours, when the action of dicumarol becomes manifest. Heparin is given in dosages of 50 to 75 mg. intravenously every four hours depending on the clotting time, and dicumarol is given orally in dosages of 250 mg. on the first day, 150 mg. on the second day, and 100 mg. on the third day unless the prothrombin time is unduly elevated, when a smaller dose is given. The aim of therapy is to maintain prothrombin levels between two to two and one-half times the control prothrombin time, which usually requires 50 to 100 mg. daily.

General Measures.—The apprehension and pain which often accompanies myocardial infarction and shock is best treated by the slow intravenous administration of 10 mg. morphine sulfate, as absorption from intramuscular or subcutaneous tissue is uneven and unpredictable during the shock state. Unless large quantities of sodium are lost through vomiting or excessive sweating, sodium is best restricted during the initial stages of treatment because of retention of this ion in patients with myocardial infarction[35] and shock. Total fluid loss should be estimated and replaced either by the intravenous administration of fluids, or by the oral route if the latter is feasible. In those patients exhibiting signs of pulmonary congestion and dyspnea, elevation of the foot of the bed to treat the shock is contraindicated. The best position under such circumstances is a moderate elevation of the head of the bed which will help relieve the dyspnea, and does not significantly contribute to the severity of the shock.

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Today, probably no country in the world has an accurate knowledge of its cancer incidence rate.

* * *

The largest and most important problem today in research on the etiology of cancer is still the relative importance of extrinsic and intrinsic factors.

* * *

In skin cancer, the main etiological factors appear to be environmental, the chief of which is solar radiation.

Using existing facts about etiology, a considerable degree of control of skin cancer can be achieved by prevention.

* * *

The more the racial peculiarities of cancer as studied, the greater is the tendency for them to indicate environmental rather than hereditary causes.

* * *

No visible or palpable neck tumor should be blindly treated without definite diagnosis.

Industrial Medicine and Hygiene at Wayne University

By Arthur J. Vorwald, Ph.D., M.D.
Detroit, Michigan

FOR centuries, man has recognized that many diseases, often incurable, result directly from his various occupational pursuits. The dust of the mines, the fumes of the ore smelter, the noxious gases of combustion—all have taken their toll of a countless number of persons, largely due to man's ignorance of the causes and means for preventing occupational diseases. In modern times, the potential for occurrence of occupational diseases is vastly greater than at any period in history, yet the actual incidence of such diseases is far less in those enlightened countries benefited by advances in industrial medicine and hygiene. Highly toxic substances are daily handled in tonnage quantities, powerful x-ray and radioactive units are employed with complete safety, and useful work is carried out under conditions of extreme temperatures or pressures which in earlier times could only have been accomplished by sacrificing health, happiness and human lives.

Industrial medicine is that branch of medical practice which deals with the relationships of man to his occupation for the purpose of the prevention of disease and injury and the promotion of occupational health, productivity, and social adjustment.[1] Industrial hygiene is similarly concerned with the preservation and improvement of the health of the worker, but with emphasis on the occupational environment as it affects the individual. The primary difference between the two sciences is in the approach to the problem. In reality, the same ultimate objectives are being pursued by both medical and hygiene personnel. The combined skills of the physician, nurse, hygienist, engineer, chemist, and others are reducing the enormous complexity of many occupational health hazards to a simplified system which now permits true scientific classification, precise study, and the application of remedial measures. The significant achievements in occupational health, however, do not warrant complacency either now or in the future because the ever-expanding industrial enterprise with its development of new products and consequent need for manpower constantly poses a challenge. Industrial America recognizes the challenge and has come to appreciate the direct relationship between health and efficiency, and to accept the idea that the worker's safety and health are of vital importance.

Being cognizant of that challenge, Wayne University initiated about two years ago a new Department of Industrial Medicine and Hygiene as an integral component of the College of Medicine. The department has been developed essentially to provide Detroit and the State of Michigan with a teaching and research organization which will assist in meeting the occupational health needs of our expanding industrial community. The geographical location of Wayne University constitutes an important advantage since the capable staffs and the excellent facilities of many modern industrial and technological enterprises in Detroit are available to the department in its efforts to promote optimal adjustment of the total person to the total environment.

As previously stated, industrial medicine and hygiene are concerned primarily with the preservation and promotion of the health of the industrial worker. The objectives in that regard may be achieved by a program embracing three major areas of activity, namely:

Teaching and Training;
Research, Basic and Applied:
Service to Industry and to Community.

Teaching and Training

The greatest single need in the fields of industrial medicine and hygiene is for more expertly trained personnel. In common with most other disciplines of medicine and of science, a serious shortage of suitably trained specialists is very evident, and the current rate at which the demand

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for their skills is increasing makes it apparent that the educational activity of the department is one of its greatest responsibilities. It is anticipated that such activity may have the usual numerous com-



Fig. 1. Macroscopic visualization of gross sections of human lung prepared by special techniques. The section, at pointer, of a healthy lung is remarkably clean of inhaled dust and free of disease. The other two sections exhibit the advanced pigmented fibrosis of advanced silicosis. The upper section is complicated by a large tuberculous cavity.

plications of any educational endeavor. In last analysis, however, they must be overcome if the new department at Wayne University and, indeed, if the disciplines of industrial medicine and hygiene in any situation are to have a significant and positive impact upon the total health and environment of our industrial workers. In recognition of its responsibilities, the department is focusing attention on the development of curricula for teaching and training at the undergraduate, the graduate, and the post-graduate levels.

With respect to the undergraduate level, it is generally recognized that the vast areas opened up by science during the last few decades alone offer an unprecedented addition to the burdens of both student and faculty. The growing emphasis on preventive and "constructive" medicine, the increasing attention to factors affecting health and well-being which stem from patterns of life and environment, the importance of occupational health in the total economy and security of our country suggest but a few of the new ingredients of industrial medicine and hygiene that are to be added to the already overcrowded curriculum of our medical schools. There is no single answer to the dilemma posed in the mixing of those ingredients into the overall framework of undergraduate medical education. Reasonable resolution in that regard may be achieved by adhering to the basic premise that the primary function of the department and of the Medical School as a whole is to stimulate the student to become a good and adequate physician. Woven within the framework of that function, the objectives of industrial medicine and hygiene should be to help the student to: (1) acquire requisite knowledge, (2) establish essential habits, (3) achieve basic skills, (4) develop sound attitudes, and (5) gain an understanding of professional and ethical principles of medicine.[2] Accordingly, the department strives to promote in the student an increased awareness of the importance of the field of industrial medicine and hygiene, to give him a rather full picture of the range of activity which characterizes that field, to stimulate his interest in considering it as one in which to specialize, to acquaint him with broad concepts. Thus, the student is progressively assisted in the ways and means of recognizing and evaluating at least certain occupational hazards and diseases, their etiology, diagnosis, and prevention.

In keeping with the above objectives, during the past year the department engaged in an interesting and instructive program for junior medical students who wish to be gainfully employed during their summer vacation. Accordingly, a number of selected students were accepted as externs by one or the other of the approved medical departments of industries in and about Detroit. The practical experience, in various aspects of industrial medicine and hygiene, gained by those students was most gratifying. Similar but more broadened programs are planned for subsequent years.

The teaching and training program for the practice of industrial medicine or hygiene is designed primarily for the student who seeks academic credit at the graduate level, after he has attained a basic degree in his specialty. The problems attending that program are complicated not only by the variety of distinct and interrelated facets of such a practice, but also because each of those facets demands a different degree of emphasis according to whether the student is a physician, hygiene engineer, chemist, or a member of other disciplines of science. It is apparent that the objectives of the graduate program may have specific reference to the acquisition of knowledge

necessary for the full or part-time practice of industrial medicine and hygiene, for the attainment of recognition by the recently established Board of Occupational Medicine, or to fulfill the requirements for a higher academic degree. Obviously, it is impossible at this time to detail the components of the graduate curricula being developed by the Department of Industrial Medicine and Hygiene at Wayne University. From the medical point of view, the curriculum will follow in general the broad outline formulated at the recent Conference on the Education of Phy-

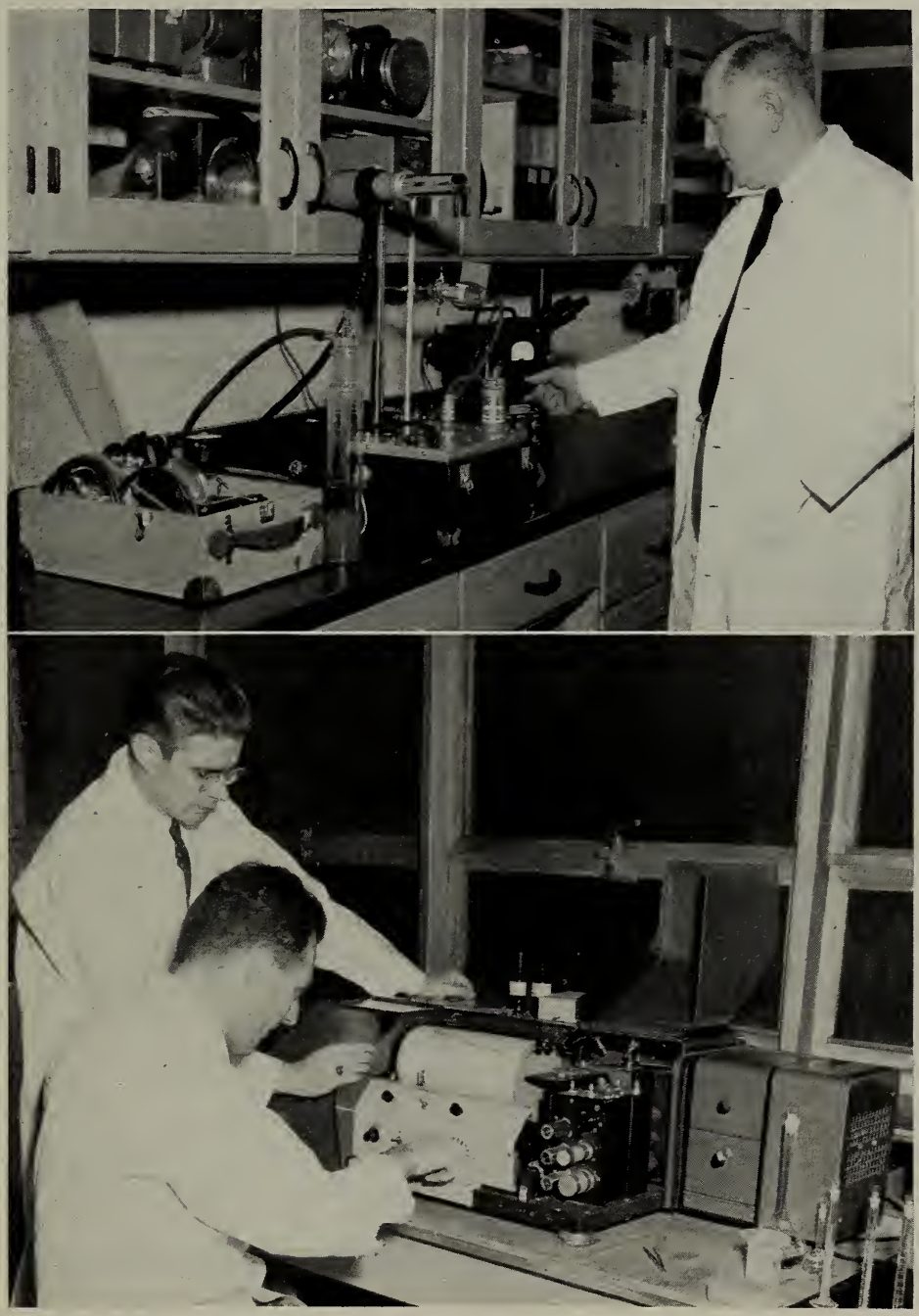


Fig. 2. *(above)* Special instruments for the collection and study of aerosols. Edward Urban, M.E., associate professor in the department, is manipulating the electrical control for the thermal precipitator, especially suitable for collecting extremely small particles of an aerosol. Depicted also are other instruments such as the impinger and the electrostatic precipitator in the foreground.

Fig. 3. *(below)* The spectrograph for analyzing various chemical substances. It is being operated by Andrew L. Reeves, M.S., under the guidance of Ralph G. Smith, Ph.D., associate professor in the department.



Fig. 4. Stainless steel chambers, specifically designed and constructed for the prolonged exposure of experimental animals to the inhalation of aerosols disseminated under controlled conditions.



Fig. 5. Stainless steel cages especially designed and constructed to hold monkeys under the best environmental conditions.

sicians for Industry.[1] That outline, although subject to revision and modification before being accepted as a standard, is presented below for the guidance of those who contemplate a course of graduate training in industrial medicine.

Curriculum of Graduate Education

A. Academic and clinical training.
 1. Basic science.
 (a) Biostatistics.
 (b) Epidemiologic technique.
 (c) Environmental physiology.
 (d) Industrial hygiene.
 (e) Applied toxicology.
 (f) Pathology of occupational disease.
 (g) Human engineering, including psychophysiology.
 (h) Preventive medicine and public health.
 2. Clinical.
 (a) Diagnostic aspects of medical and surgical specialties as they relate to occupational medicine.
 (b) Diagnosis and treatment of occupational diseases.
 (c) Care of emergencies.
 (d) Rehabilitation.
 (e) Mental health.
 3. Ancillary activities.
 (a) Medical and business administration, including budgets, interdepartmental relations, layout, personnel, public relations, et cetera.
 (b) Legal aspects, including compensation law and insurance systems.
 (c) Community facilities and relations.
 (d) Health education and industrial psychology.
 (e) Engineering principles (mechanical, electrical, safety).
 (f) Industrial processes and methods.

B. Research projects.

C. Field training.
 The purpose of this year is to put into practice, under supervision, that which has been learned in the previous two years.

In the interest of the hygienist, chemist, and other non-medical students, the department is designing curricula for those who elect to further their formal training in areas pertaining to occupational health. Courses dealing with all phases of industrial hygiene and the necessary basic sciences make up the academic portion of training. Seminars in current and advanced topics, together with extensive laboratory exercises complete the program. Full use will be made of courses offered by other departments of the University, and of the excellent opportunities for

practical field training available in the industries of Detroit.

Another responsibility of the Department of Industrial Medicine and Hygiene involves the area of teaching and training at the postgraduate level; that is, for those physicians and hygienists who have an interest in occupational health and, therefore, seek "refresher" or special subject reviews. Obviously, the content of such reviews must be developed and oriented according to the objectives which, from a medical point of view, may have reference to the practicing physician who is concerned only occasionally with a disease related to occupation. Or, the objectives may pertain to the physician who, because of a part or full-time industrial affiliation, has need for additional knowledge in specific areas of occupational medicine and hygiene. With respect to the latter physician, his ultimate objective in taking the reviews may be in preparation for specialty board examinations.

The composition of the postgraduate educational program and the methodology to facilitate its objectives are dependent in large measure upon the motivation and skills of both the student-physician and the teaching personnel. Other practical considerations, such as the time available for the physician who has scheduled obligations to other responsibilities, must also be taken into account. Physical facilities for the most advantageous use of lectures, laboratory exercises, case presentations, group conferences, and seminars are also important factors. The program may be concerned with the general principles and scope of occupational medicine and hygiene; it may give particular attention to certain aspects of preventive medicine as it relates to toxicology, epidemiology, biostatistics, industrial safety, and occupational disease control; it may emphasize special occupational health problems as they pertain for example to dermatitis, hearing loss due to noise, cardio-respiratory disabilities, and mental health; or, it may stress such things as pre-employment and periodic medical examinations, job placement, absenteeism, rehabilitation, sickness benefits, workman's compensation, and professional relations.

One further aspect of interest in a program concerning industrial medicine and hygiene, is the course work in special topics offered on a non-credit basis. One such course already given, dealt with audiometric techniques and was designed to provide technical know-how in that area on a very practical basis. Other courses along similar lines are envisioned for those individuals who seek proficiency in relatively special areas of study as it may pertain to the application of instruments or procedures of timely interest in occupational health.

Research

The field of industrial medicine and hygiene embraces many areas in need of research. Opportunities in that regard are almost limitless, not only for the medically qualified investigators, but also for members of other fields of science. The industrial hygienist, toxicologist, biochemist, physicist, engineer, physical and analytical chemists and others have joined forces with the physician to investigate the nature, prevention and therapy of occupational disease processes. History is replete with their accomplishments, as for example the recognition and prevention of the hazards attending exposure to certain dusts and fumes of lead, mercury, arsenic-bearing ores, radioactive substances, beryllium compounds and quartz. Many other similar examples could be cited here, but in relatively few instances is the problem so clearly understood that no further study has to be done. This is true even in the case of silicosis which has been familiar to medical men for many years. Although much is known about that occupational pulmonary condition, there is still an appreciable lack of knowledge concerning the precise manner in which crystalline free silica exerts its specific toxic effects. Consequently, therapeutic measures have not been developed for silicosis even though its prevention is more or less a matter of common knowledge.

Technological progress and product development have been most rapid during recent years and in many respects have expanded far beyond our knowledge of the human component which they involve. On every hand, there are new technological advances, each with an unknown and possible hazardous element. There are new alloys, solvents, pesticides, plastics and gases. The discharge of effluents from industrial processes to the outdoors combined with increased concentrations of diesel and gasoline engine exhausts have created serious air pollution problems in many cities. The noise and vibrations of fabrication, the biological stresses of automation, the questions pertaining to mental health and absenteeism, and the problems unique to the female worker, constitute

critical areas for continued study. More precise methods must be developed for measuring and evaluating the degree of disability resulting from occupational injury and disease. Finally, specific

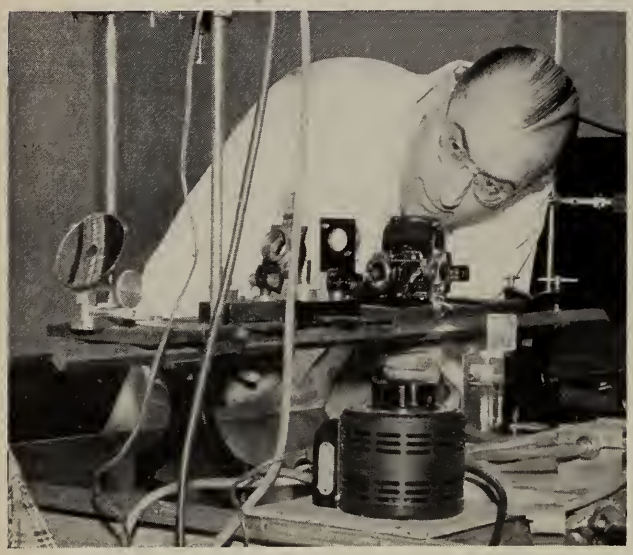


Fig. 6. A view in the laboratory for the study of noise as it affects hearing. Various custom-built instruments are being arranged by Mr. Domeier who is associated with Heinrich Kobrak, M.D., Ph.D., professor of industrial otorhinolaryngology in the department.

diagnostic methods and therapeutic measures including rehabilitation, must be defined if industrial medicine and hygiene are to be fully effective.

Service to Industry and Community

From this review of the scope of industrial medicine and hygiene, it is evident that there is much to be done in the way of education and research. Obviously, such efforts will be rather fruitless if in final analysis they fail to serve both industry and community in solving their mutual health problems. This aspect of service by a University Department of Industrial Medicine and Hygiene is no less important than teaching and research. In fact, they complement each other and in a sense have a practical relativity not unlike that which exists between the laboratory, the hospital, the industry and the community. The solution of many occupational disease problems, however, is usually beyond the scope of most industrial and community practices, while at the same time it is ideally suited for a University department organized for that purpose and for which the skills of other activities in the University can be utilized if needed.

Illustrative of the above, consider the problem attending the exposure of a population to the inhalation of an industrial substance suspected of producing cancer of the lung. In an attempt to study the possible relationships between the various factors involved, two general approaches are possible, namely, the epidemiological and the experimental.

Briefly, the epidemiological approach concerns the precise study of every member of the exposed population and of their atmospheric environment. More specifically, the study involves: the determination of where, how frequently, and under what circumstances the lung cancer occurs with respect to exposure to the substance; and the establishment of relationships between the parameters and the attack ratio for cancer of the lung. Those parameters have reference to the physical and chemical characteristics of the substance and of other agents possibly contaminating the atmosphere at the breathing level of the exposed individual and to the atmospheric concentration and biological toxicity of the substance at that level, and to the length and specific time of the exposure with respect to the health status of that individual's lung.

The experimental approach will throw light not only upon the capacity of the substance under controlled conditions to injure the lung, but also upon the specific nature of that injury, whether it is mild or severe, acute or chronic, productive of simple uncomplicated fibrosis, or whether it will initiate the abnormal growth of epithelium and will cause the development of cancer. The experimental results supplement the epidemiological evidence and indeed, they may constitute knowledge without which a valid opinion could not be formulated. The approach invólves a variety of experimental animal species, subjected to one or the other of different test procedures, namely: the prolonged exposure to the inhalation of aerosols of the suspected substance as it is encountered in industry; the intratracheal injection and consequent pulmonary deposition of known amounts of that substance; the localization of the substance either intraperitoneally or subcutaneously; and the implantation of embryonal lung tissue in association with the substance.

The particular problem, presented above, is perhaps more difficult than others which could have been selected. It emphasizes, however, the diverse aspects of a problem that so frequently

complicates industrial health and that can be successfully attacked by the teamwork of individuals with training and experience in various branches of science, including epidemology, biostatistics, medical diagnosis, pathology, radiology, cancerology, industrial hygiene, toxicology, chemistry and physics. Such a team of individuals is rarely found outside university structures or certain governmental institutions. Therefore, a University Department of Industrial Medicine and Hygiene should be a facility not only for teaching and research, but also one to which industry and community may come for assistance in problems of occupational health. Conversely, the department should be so situated that it can readily go to industry and community for guidance and help.

Departmental Accomplishments

The foregoing discussion briefly presents some concepts concerning occupational health envisioned by the Department of Industrial Medicine and Hygiene in the College of Medicine at Wayne University. In accordance with those concepts, the department has established and furnished various laboratories with major items of equipment including an emission spectograph, x-ray diffraction spectograph, and spectophotometers. Special purpose laboratories have also been equipped to serve certain activities such as pathology and histopathology, analytical chemistry and biochemistry, industrial hygiene, engineering and petrography. One such laboratory is concerned specifically with problems of hearing impairment resulting from exposure to industrial noise. Special quarters are used for the maintenance of monkeys and other experimental animals under the best possible conditions, including proper temperature, humidity and clean air. A room has been assigned for the roentgenographic study of animals. Also the large penthouse of the new Medical Sciences Building is used to hold several unique stainless steel chambers which have been especially designed and constructed for the prolonged exposure of experimental animals to the inhalation of specific areosols under controlled conditions. Of greatest importance, the department has assembled a staff composed of a team with special training and abilities devoted to teaching and training, to research and service in the interest of occupational health. With the co-operation of the physicians and scientists and of industry, it is hoped that the new Department of Industrial Medicine and Hygiene at Wayne University will add to the great prestige of medicine in Michigan.

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EPITHELIUM-LIKE CELLS

(Continued from Page 271)

nant or truly epithelial nature of these cell strains cannot be inferred from their appearances in culture since one of the strains has been developed from bone marrow of a patient with diabetes mellitus in whom there is no present evidence of malignancy. The six strains can be maintained continuously and the cells can be released from glass by trypsin for making suspensions suitable for obtaining replicate specimens. Four have been maintained continuously for periods over six months to one year.

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Maternal Deaths from Obstetric Anesthesia and Analgesia

A Plan for Their Elimination as Worked Out on a Teaching Obstetric Service

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WITH the reduction of maternal deaths from other causes the relative number of parturient women who die from anesthesia is increasing.[1]

The major factors in these obstetric anesthesia deaths are the use of contraindicated agents and methods by persons unskilled in their use.[2-4] In those states in which maternal mortality studies are being made, anesthesia has been found to be the fourth to fifth most common cause of maternal death.[5] This advent of anesthesia as a major cause of maternal mortality constitutes a great challenge to the medical profession, and one which must and can be met. This is especially true since successful labor and delivery for mother and infant will occur in almost every case without maternal medication of any kind. Women do not die from the pains of childbirth, and physicians must see to it that no parturient women die from contraindicated or improperly administered analgesic and anesthetic agents. Relief of pain in childbirth has come to be so much a part of our life today that it behooves all physicians practicing obstetrics to learn to use analgesic and anesthetic agents moderately and safely. Death of either mother or infant from anesthesia is nearly always a preventable one, and thus it is possible to eliminate all but a very few of these unhappy fatalities.

In a recent study[4] there were thirty-four maternal deaths from anesthesia in Michigan during a four-year period in which there were 693,309 births. Since over three fourths of these women received some form of anesthesia, there was about one fatal case in every 16,000 anesthesias for parturition. This study showed that 60 per cent of the thirty-four deaths were from spinal anesthesia, most of which was given by the attending physician. In half of these cases there were definite contraindications to the use of spinal anesthesia, and in two thirds of them there was improper technique—either excessive dosage, contaminated ampule, or unclean equipment. Inhalation anesthesia accounted for 23 per cent of the anesthesia deaths, and most of it was given by unskilled or inadequately trained nurse anesthetists. There was also one death from continuous caudal anesthesia and one from the mistaken injection of 5 to 10 cc. of epinephrine into the perineum in place of the intended local anesthetic solution. Two deaths occurred from excessive dosage in continuous spinal anesthesias, and these were given by medical anesthesiologists who apparently did not fully appreciate the fact that *the pregnant woman tolerates only half, or less, of the average dose given to a non-pregnant adult.*

In July, 1951, an anesthesia program was instituted on the obstetric service of Herman Kiefer Hospital; this program was devised on the basis of attempting to eliminate maternal deaths from anesthesia. During the preceding three and one half year period, during which 11,165 women were delivered, there were four deaths from anesthesia, a rate of 3.6 deaths per 10,000 parturitions. Since the institution of this plan, we have delivered only 20,650 women without a death from anesthesia, but we hope to be able to go on with practically no more fatalities for a long time. This has been accomplished in an unusual clientele, since it is composed entirely of the medically indigent women of the City of Detroit, many of whom have had no prenatal care when they first present themselves in labor or in trouble. Thus many are very poor anesthesia risks. The clientele is unusual from another aspect, namely, that about 45 per cent either refuse any form of analgesia and/or anesthesia or arrive too far along in labor to permit the administration of any. This leaves us with about 2,900 cases who will receive some obstetric anesthesia each year.

Since we are running a teaching service and a large resident training program, we cannot arbi-

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trarily abolish this or that commonly employed form of anesthesia as we must teach and train our residents and interns in obstetric anesthesia as well as in obstetrics. What we did in our program was to set up strict indications and contraindications for the uses of spinal, continuous caudal, inhalation, intravenous pentothal and local anesthesia, also outlining methods and techniques in proper detail as well as dosage limits of the agents used. Also, through the generous and helpful co-operation of Dr. Ferdinand Greifenstein, professor of anesthesiology at Wayne, we began to send our more junior obstetric residents to his anesthesiology resident training service at Detroit Receiving Hospital for six weeks of intensive training and experience. This simple program has been very effective, as shown by our results to date. We believe that it is reasonable to assume that maternal deaths from anesthesia can be almost entirely eliminated. Even though we may fall somewhat short of this admittedly Utopian goal, our sincere and energetic striving to attain it, we believe, is one of the needed reforms in obstetric practice today.

Under the effect of the program the incidence of spinal anesthesia decreased from 32 to 10 per cent, and we believe that a 10 per cent incidence is a proper figure for a city hospital teaching service such as ours. Our rules regarding the use of spinal anesthesia are that only a skilled resident may give it, or he may scrub and instruct an intern in its use. It is not to be given to any patient having hyper- or hypotension, nor to one who has had any appreciable blood loss. We rarely give it to multiparae, and use it only in those sections in which the patient cannot be counted upon for proper co-operation under local anesthesia. We have not used any continuous spinal anesthesia for five years and do not advocate its use in obstetrics on any basis.

Our spinal drug dosages for vaginal delivery are: Procaine 25 to 50 mg. with or without dextrose, metycaine 20 to 30 mg. with or without dextrose, pontocaine 2 to 5 mg. with 5 per cent dextrose, and nupercaine 1.5 to 3 mg. with 5 per cent dextrose. We do not exceed these limits. When dextrose has been added to the anesthetic agent, we slowly inject it through the third lumbar interspace with the patient sitting up, and then gently place her down flat on her back, with her legs extended and flat, from thirty to forty-five seconds following the injection. We do not inject the spinal anesthetic during uterine contractions, nor do we give it to women who are having tumultuous second-stage labor. The spinal drug dosages for cesarean section are: procaine 60 to 80 mg., pontocaine 6 to 8 mg., and nupercaine 3 to 5 mg. If the level of anesthesia does not go high enough for a full length lower midline abdominal incision, or if the anesthesia wears off before closure of the abdominal incision, we advocate the supplemental use of local anesthesia. Currently we are employing 0.5 per cent xylocaine solution as a local anesthetic with very adequate results, limiting the total amount given in any one case to 80 cc.

We give just enough caudal anesthesia to permit each resident some experience in its use. Our residents learn the basic aspects of caudal anesthesia administration during their six weeks on the anesthesiology service. We recognize that continuous caudal anesthesia for labor and delivery bestows a marvelous relief from pain on the mother, but the method is so dangerous for both mother and infant that it should never be used except in the hands of an expert skilled in its use, and in a hospital where full necessary equipment for artificial respiration is available as well as trained personnel being on duty twenty-four hours a day.

The employment of inhalation anesthesia in our program has consisted solely in the use of open drop ether or closed system ether-oxygen, and it is given in only about 2 per cent of deliveries. We have not used any nitrous oxide simply because its anesthetic effect is dependent principally upon its causing asphyxia, and asphyxia is the main thing we wish not to give to the infant *in utero*. We do not use any other anesthetic gases, the exception being that Dr. Greifenstein, or one of his staff from the department of anesthesiology, may exercise their own judgment in this regard when they come in to help us on an exceptionally poor-risk hypertensive patient who needs a section and is not a fit candidate for either local or spinal anesthesia. Such cases, fortunately rare, always tax the ingenuity of even the ablest anesthesiologist available, and probably represent the major portion of that final, irreducible minimum of cases which will comprise the maternal anesthesia death group of the future. Our major indication for ether anesthesia is transverse presentation of the fetus, with prolapse of an arm and/or the cord, the cervix being from 8 centimeters to fully dilated. Such a situation is our sole indication for internal podalic version in single pregnancy, and deep ether anesthesia is essential for this procedure in practically all cases.

Intravenous sodium pentothal has been used in the past (prior to 1952) on our service in some instances to supplement cesarean section being performed under local anesthesia following delivery of the infant. The effectiveness of xylocaine as a local anesthestic agent has been so great, however, that we have now found the need for such supplementation to be practically nil. Following delivery of the baby, in such a case, we may give 1/6 grain of morphine intramuscularly, or 60 to 100 mg. of demerol. We do not give more than 25 mg. of demerol intravenously, and then it is slowly injected over a period of several minutes; the remainder of the dose is then given intramuscularly.

We have urged the increasing use of pudendal nerve block anesthesia for vaginal deliveries, and of local anesthesia for sections, and have recommended that all multiparae of a parity of four or greater at least be given local infiltration of the perineum.

Prior to the institution of our program only 7 per cent of our patients were delivered under pudendal nerve block, or had their sections done under local anesthesia. Since July, 1951, this incidence has increased to 48 per cent of all deliveries, or to about 75 per cent of cases receiving obstetric anesthesia. Both local infiltration and pudendal nerve block anesthesia have been steadily increasing in popularity among our residents and interns, and most of them are so adept in blocking the pudendal nerves that they seldom miss obtaining a good perineal saddle area of anesthesia. We find pudendal block anesthesia to be completely adequate for forceps deliveries, for most cases of manual rotation of the head (between contractions), for delivery of twins, for easy breech deliveries as well as breech extractions, and we find no diffculty in performing manual removal of the placenta if the patient is at all co-operative. One of the greatest benefits of pudendal block anesthesia is that *nearly all women will deliver spontaneously through an adequate episiotomy unless the obstetrician interferes with the normal progress of labor and uses forceps.* Another very wholesome benefit is that the obstetrician *has* to be with his patient from the latter part of the first stage of labor on through completion of the delivery, which is certainly fit and proper from all aspects.

There are many contraindications and limitations to the use of spinal, caudal, inhalation, and intravenous pentothal anesthesia in pregnant women, but there are only three rules governing the use of local anesthesia which must be strictly observed. These are:

1. Local anesthetic agents should not be given when there is a history of drug sensitivity, particularly to those drugs commonly used for such anesthesia.

2. Care must be exercised not to inject the drugs intravenously, and this can be assured by carefully pulling back on the syringe plunger before each injection.

3. The toxic dosage limits of the drug must not be exceeded.

While we are aware that there have been some maternal deaths from local anesthesia we are sure that in the hands of the average physician who learns to use it properly it will be many times safer than any other kind of anesthesia he might employ. Any physician who is sufficiently interested in learning how to perform pudendal nerve block can do so. The method, as described and pictured so well by Klink,[6] of the Temple University Hospital in Philadelphia, is the one we use, teach and recommend. Our technique includes the injection of about 6 cc. of 1 per cent xylocaine solution through a 22-gauge, 5-inch needle (with protective hub), into the mouth of Alcock's canal on each side of the pelvis. We do not add any epinephrine to the local anesthetic solution because xylocaine has a relatively long duration of effect; the use of epinephrin also is dangerous since *it sensitizes the heart muscle to most drugs* which might be commonly used in connection with delivery. Neither do we add any hyaluronidase, since xylocaine has some penetrating and spreading properties of its own.

Many of our internes learn to perform pudendal nerve block quite well during their month on the obstetric service, and all of our residents learn to perform section easily under local infiltration anesthesia. We believe that any physician who is adept at the performance of section can learn to do it well under local anesthesia, *provided he has a sincere desire to do so.*

The author has used pudendal nerve block anesthesia for 98 per cent of all the vaginal deliveries in his private practice in the past five years, and has performed 90 per cent of his sections under local anesthesia; his incidence of forceps delivery is about 5 per cent, since all but a few

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Johanson Urethroplasty for Repair of Urethral Strictures

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OPERATIVE repair for stricture of the urethra is not a new surgical procedure. Dugas, in 1836, reported the first case of complete resection of the urethra for the repair of a stricture. It was treated postoperatively by an indwelling catheter without any attempt to suture the ends together. Many other urethroplasties have been devised since then, but are useful mainly in short strictures. The major premise of these techniques is to dissect free and excise all involved scarred urethra and surrounding tissues, and then a direct end-to-end anastomosis of normal tissues is performed. Grafting techniques have also been devised but require follow-up postoperative dilatations for an indefinite period.

The Johanson type urethroplasty for the repair of urethral strictures is an application of the Denis Browne technique for hypospadias. The original ground work for this type of repair was done by Duplay as early as 1874, when he sutured buried epithelium around a catheter. G. Marion and J. Perand in 1942 used Duplay's method for hypospadias repair but modified it by making the constructed canal continuous with the original urethra. Denis Browne in 1949 presented his method for construction of the urethra in hypospadias. It differed from the above authors in that (1) the buried strip was wider, (2) the strip was left fully intact without any undercutting, (3) the buried epithelium was not sutured over a splinting catheter, and (4) a dorsal relaxation incision was used in all cases.

Johanson, in reviewing the results of Denis Browne, felt that he could use the principle of a buried intact epithelial strip to develop a surgical cure for any type of urethral stricture. It was also his desire to be able to apply the operation regardless of pathogensis, extent, or degree of severity of the stricture. He felt, that to be a worthwhile operation and an improvement on preceding urethroplasties, no after treatment should be required, especially dilatations. The first stage of this operation creates an artificial hypospadias but also serves two time-honored principles; one, the draining of an infected area, and two, diversion of the urinary stream from this infected area.

In applying the buried intact epithelial technique, the following diagnostic criteria, indications, and contraindications were employed.

Diagnosis

All patients were studied thoroughly. Upper urinary tract studies, naturally, were checked by intravenous pyelograms since the introduction of the cystoscope, in most cases, was impossible. The diagnosis of the stricture of the urethra as to caliber, length, number, and location was evaluated by olive tip bougies and oblique urethrograms using 30 per cent sodium iodide in a viscid solution of lubricating jelly.

Etiology

The etiology of the cases presented includes: (1) those mainly due to an old gonorrheal urethritis, (2) one due to trauma, (3) one postoperative following a transurethral resection, (4) one chemical in origin, (5) one postoperative stricture in a previously repaired hypospadius with repeated periurethral abscesses, (6) one in a congenitally stenosed urinary meatus with resulting dense stricture along the entire pendulous urethra.

Indications

Our indications for surgery are not as liberal as Johanson's. We felt that any non-tuberculous stricture, 2 cm. or more distal to the membranous urethra, single or multiple, that did not respond to gentle dilatation, was amenable to this type of repair. This includes a large number of patients seen at Detroit Receiving Hospital who return re-

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Presented at the meeting of the North Central Section of the American Urological Association, Chicago, September 29 through October 1, 1955.

peatedly with "tight" filiform strictures with large periurethral abscesses and extravasations, typical "flowering pot" perineums. This includes patients whose strictures could not be dilated above No. 16 F. without producing either severe pain, profuse bleeding, acute ascending pyelonephritis, or an acute prostatitis. Johanson, on the other hand, does not limit his repair as to location and states that he has excised fistulous tracts and fibrous tissue en bloc proximal to the membranous urethra with complete continence following surgery.

Contraindications

The only contraindication to this procedure is dependent on the patient's ability to stand the anesthesia required. One word of caution—a first stage urethroplasty should not be performed too soon after an acute periurethral abscess; it is best to wait at least six to eight weeks or until all inflammatory changes have disappeared. We learned the hard way; we encountered a severe hemorrhage because the tissues were extremely friable and accurate hemostasis was impossible.

Technique

We followed the technique as outlined by Johanson in his original article and by Flocks and Culp in their book entitled *Surgical Urology,* with minor variations.

The patient is placed in a mild lithotomy position, so that either perineal or suprapubic regions can easily be exposed. The operations is divided into two stages. The first stage varies as to the location of the stricture in the urethra. It may be divided into meatal and those distal to or proximal to the perineal portion of the urethra.

1. In meatal stenosis or strictures which extend down toward the bulb, the incision begins at the meatus and extends to a point at least 2 cm. beyond the strictured area.

2. In strictures distal to the perineal urethra, a No. 26 sound is passed to the involved area. No attempt is made to force the sound beyond this point as only undue trauma will result. An incision is then made in the midline of the ventral portion of the penis, through skin, fascia, and corpus spongiosum, down to the sound. The incision is extended in a distal and proximal direction until at least two cm. of normal urethra is exposed. If there are no draining sinuses or periurethral abscesses, one need not dissect or excise the scarred urethral mucosa or corpus spongiosum. If the stricture is so severe that the proximal end cannot be identified accurately, a suprapubic cystostomy and passage of a sound through the vesical neck down to the stricture site may be performed. The skin edges of the penis are then sutured to the edges of the urethral mucosa with 3-0 chromic catgut or 4-0 black silk.

3. If the strictured area extends into the perineal portion of the urethra, a flap of scrotal tissue must be inverted to give one enough skin for closure of the urethra in the second-stage operation. The technique varies, in that, an incision is made in the perineum through skin, subcutaneous tissue, central tendon and bulbocavernosus muscle to the strictured area. The urethra is divided until at least 2 cm. of normal urethra is seen distally and proximally. The proximal urethra may have to be identified by passing a sound from the vesical neck to the strictured area. In this area it is very important to excise all fistulous tracts and surrounding scar tissue completely. Next, the scrotal skin flap, that is to be inverted, is prepared. This is done by making an incision along the median raphe 3 to 4 cm. long. The skin between the inferior point of the scrotal skin incision and the transverse incision in the perineum is freed. The dissection is continued until a bridge of tissue is formed that can be inverted and sutured without tension to the normal urethra. The edges of the scrotal skin are then sutured to the edges of the incised urethra. This forms a funnel shaped external urethrostomy which Johanson states gives a better functioning permanent urethrostomy than the type that is located posterior to the scrotum. The perineal incision is closed by approximating the bulbocavernosus muscle, reconstructing the central tendon and closing the skin. A No. 18 F. Foley catheter is left indwelling for three to four days after this procedure. Johanson insists that even if hair-bearing areas are inverted, the hair will soon disappear and afford no hazards. We do not fully agree in this premise; but perhaps the future will clarify this difference of opinion.

The interval between stages varied with the healing powers of the patient and averages from eight to ten weeks. The second stage technique is quite universal. Urinary diversion should be performed, and it was done by suprapubic cystostomy in all of our clinic patients while a perineal urethrostomy was performed in all of our private patients. A strip of urethra and surround-

TABLE I. CLINIC PATIENTS—DETROIT RECEIVING HOSPITAL

Name	Age	Caliber		Etiology	Type O. R.		Hospitalization		Complications
		Preop.	Postop.		1st	2nd	1st	2nd	
Leonard, J.	38	acute ret. 4F	22F	GC 1939	Scrotal	flap	4- 2-55	6-12-55	7-13 Debridement granulations. 12-8 Stenosis distal opening. 2nd stage closure 1½ cm.
Isaiah B.	47	12F	24F	GC 1940	I		6-14-55	8- 5-55	Non funct. rt. kid. I.V.P. Pyuria rt. neph. 7-26-55.
Benphy F.	20	10F	24F	GC 1948		II	8- 5-54	10- 4-54	Uneventful.
James T.	32	14F	22F	GC 1941	I		5-16-55	8-23-55	GC—after 1st stage 3-55
Paul B.	32	4F	24F	GC 1939	I		1-10-55	6-13-55	Uneventful.
Earl T.	33	12F	24F	GC 1938	I		10-11-55	12-30-55	Fistula after 2nd stage. Closed spontaneously.
L. C. Shermon	24	ret. 0	24F	?		II	1-10-55	10-28-55	Uneventful.
James B.	50	14F	24F	GC trauma	I		2- 4-55	5-26-55	Incontinence preoperative. Complete continence postoperative.
Grover R.	50	16F	24F	GC		II	4- -55	6- -55	Post II urinary fistula. Closed spontaneously.
Lee W.	63	12F	—	Etio. TB?	I		2-14-55	—	TB sanatorium. Expired millary TB 4-20-55.
A. Arnold	37	4F	26F	—	I		11-15-54	1-27-54	Voids well.
James D.	32	16F	24F	GC	I		10- -54		Sent to Jackson Prison, Jackson, Michigan.
Edward S.	33	4F	24F	GC 1947	I	II	11-29-54	3-21-55	Postop. hemorrhage 12-18-54. Urethral fistula following 2nd stage. Closure of fistula 6-6-55.
Andrew P.	25	10F	22F	$CuSo_4$ GC 1947	I		11- 1-54	1-20-55	Perineal infection.
Harvery W.	67	16F	24F	GC 1915		II	12- 6-54	5-19-55	Practically spontaneous 2nd stage closure.
Fred W.	40	16F	22F	GC 1930 14 prev. OR	I	II	9-20-54	1-17-55	Dissection of perineum 1st stage. Revision proximal at end 1-22-54. Urethral fistula following 2nd stage. Spontaneous closure.
George K.	68	10F	24F	T.U.R. Det. Ost. Incont.	I		2- 7-55	5- 2-55	Uneventful—complete continence postop.
William S.	70	16F	16F	Straddle injury age 16		II	5-24-55	7-12-55	Required post 2nd stage dilatation.
Floyd H.	69	0	24F	8-9-55 Periurethral phlegmon GC	I	II	10-18-54	3- 3-55	1st stage radical dissection perineum and Lt. orchidectomy. 2nd stage and cystolithotomy. Urethral fistula closed 4-28-55.
Joseph W.	74	14F	24F	Dil. since 1935 periu. abscess 3 mos. prev. GC in youth	Inversion of scrotal flap- supra to find proximal urethral.		11-11-54	2-16-55	2nd stage 1-29-55 developed perineal fistula. Closed spontaneously.
Marchello	57	16F	28F	GC		II	7-27-55	9-20-55	False passage into membraneous. Retention-hematuria. 1st degree right hydronephrosis.
Mika	37	16F	28F	Cong.	Meatal extends to penoscrotal junction.		3-14-55	5-24-55	Recur. bouts of pyelonephritis. Prostatitis. Rt. hydronephrosis, 1st degree.
Brian	28	16F	26F	Cong. hypospadius	I		1-18-55	4-18-55	Recurrent bouts of periurethral abscess. Recurrent pyelonephritis.

ing skin approximately 2 cm. wide or 75 per cent of the circumference of the urethra desired, is left intact. The lateral skin edges of the penis or scrotum are freed for a distance of 2 to 3 cm., so that the skin edges can be approximated over the buried strip without tension. A dorsal relaxation incision is made if necessary. The skin is closed with interrupted sutures of chromic 3-0 or 4-0 black silk. The tension is taken off this suture line by using No. 32 wire held in place with lead shot. Care must be taken not to draw the tension suture up too tight as the lead shot will cause necrosis of

the skin and possibly result in a fistula. The wire sutures are removed on the seventh to eighth day, the black silk on the tenth day if healing appears complete. The patient is allowed to void on the tenth day if the wound appears solid. Many patients in their anxiety to know the results voided as early as the second day.

Complications

We had one case of rather severe postoperative hemorrhage following a first-stage operation. As mentioned before, we operated too soon after a periurethral abscess, when the tissue was very friable and hemostasis difficult. We resorted to a perineal pressure dressing, and after a period of about five days the bleeding stopped. We had a total of 6 postoperative fistulas. Of these, four occurred along the approximation of the skin edges and two were secondary to pressure necrosis from the lead shot. Three of the fistulas closed spontaneously. Three required simple surgical closure with uneventful postoperative course. One patient developed an infection at the site of the perineal incision. All of these patients had healing without recurrent stricture formation. Only one patient was a failure as to surgical repair and required postoperative dilatation.

Conclusion

The application of the buried intact epithelial tract technique for the repair of urethral stricture after the method of Johanson with certain modifications has been presented. This procedure was used in highly selected cases when conservative treatment either failed or became unbearable. In our hands it has been very successful, justifiably so, since we have had but one failure. It is our firm conviction that as time goes on and our technique improves we will attempt a far greater number with a greater percentage of excellent results.

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HORMONE THERAPY IN RHEUMATIC DISEASES

(Continued from Page 282)

toxic effects, careful selection of drug and dosage is necessary in most instances. Therapy with large doses of hormones for prolonged periods in patients with carditis due to rheumatic fever seems to lower the incidence of residual organic heart disease and in this situation the risk of side effects seems worth taking.

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Pigmented Skin Lesions

Treatment with Monobenzyl-ether of Hydroquinone

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IN 1939 Oliver, Schwartz and Warren[1] proved that leucoderma found in rubber workers was due to the action of monobenzyl-ether of hydroquinone. Its use as a satisfactory therapeutic agent for the correction of hyperpigmentation had to await material of greater purity than the industrial product. The purpose of this brief discussion is to outline my personal experience with the response of melanin hyperpigmented skin lesions to an ointment containing the monobenzyl-ether of hydroquinone (Benoquin)®* and to compare the results with the reports of earlier workers. Twenty cases were followed from twelve to sixteen months. The patients in this series were all Negroes. Chloasma was the most common condition. There were several cases of residual pigmentation following lichen planus, lupus erythematosus and the residual scars of acne vulgaris. There was one case where an attempt was made to bleach the normal skin to match the leucodermic areas of extensive vitiligo.

Varying strengths of Benoquin in different ointment bases were used. The concentration varied from 5 to 20 per cent. On the initial visit the patients usually were given the 5 per cent ointment, and the result was observed one week later, after daily applications. If there was no change, they were instructed to use the same preparation more often with gentle massage or they were given a stronger ointment. The absolute necessity of applying the medication only to the lesions and keeping it away from surrounding areas was emphasized. It became evident at an early date that the patients had to be watched closely to see that they did not depigment beyond their norm and did not depigment the normal skin by careless application. A simple color chart devised by Gates[5] was found helpful in evaluating the effect. With experience the rate of depigmentation could be forecast, being inverse to the age of the lesion and the depth of pigmentation. It was also found that only those lesions responded well to treatment in which the excess pigment was in the epidermis. Dermal pigmentation was not influenced by this therapy.

Some illustrative cases will be described in detail:

Case 1.—A thirty-seven-year-old woman had chloasma on each cheek measuring 1 by 2 inches. There were two shades of difference between the lesions and the normal skin (Gates color chart). Five per cent Benoquin was started daily. In two weeks she had depigmented beyond her norm. Medication was stopped and in one week all areas of the skin were the same color. Weekly use of the ointment was advised and this has kept her skin normal for six months.

Case 2.—A thirty-year-old woman had hyperpigmented scarring on the face. The lesions resulted from a fairly extensive case of discoid lupus erythematosus. Ten per cent Benoquin was found more suitable for her skin, and in four months her scars were one shade lighter than her normal skin. She preferred the lighter shade as it enabled her to more cleverly disguise her scars. She had been maintained on the five per cent strength for weekly application for six months.

Case 3.—A sixteen-year-old girl had small discrete hyperpigmented scars over her entire face as a result of traumatized acne. She applied the medication with cotton applicators directly to the dark areas. With care she was able to depigment only the involved areas in six weeks. She has remained normal for four months without medication.

Case 4.—In this case an attempt was made to depigment the normal skin to harmonize with the leucodermic areas in a person with extensive vitiligo. This was a fifty-eight-year-old woman who had lost most of her pigment except on the face and extremities. After trying various strengths the 20 per cent ointment was chosen. An area on the leg was the original test site. The response was good. The face was then treated, and

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Supported in part by the Research and Development Division Office of the Surgeon General Department of the Army, under contract No. 49-007-md-584 and in part by a grant from the A. Shiffman Foundation.

*The preparations used in this study were supplied by the P. B. Elder Company, Bryan, Ohio, through the courtesy of Mr. Howard E. Parker.

today one year later there is possibly one shade of difference between her face and her depigmented skin, whereas originally there were four shades. This confirms the experience of Stolar, as quoted by Lerner and Fitzpatrick,[3] who depigmented a person who had some undesirable pigmented remains with her vitiligo.

There are some undesirable side effects to be watched. Two cases will be cited to illustrate this point.

Case 5.—A woman, aged thirty-five, had two large areas of chloasma over her cheeks measuring 3 by 4 inches. There were two shades of difference between the lesion and her normal skin. She was extremely concerned about her "spots." She was instructed to use 5 per cent ointment every day. After seeing some depigmentation she took matters in her own hands and began using the ointment several times daily along with vigorous massage. In two weeks she had depigmented four shades beyond her norm. Medication was stopped. She repigmented in four weeks a shade beyond the norm. The ointment was resumed and the previously described results were noted. The vicious cycle was never broken, and a satisfactory result was not obtained. Her emotional state became so bad at one stage that psychiatric help was sought.

Case 6.—A woman, aged twenty-eight, when first seen was depigmented on the face three shades beyond her norm following the use of 20 per cent Benoquin® for chloasma. Oxsoralen lotion** was used to encourage repigmentation. There was visible progress until she decided to reapply the 20 per cent Benoquin ointment. She again depigmented to the same color that she was when first seen. She also developed a few leucodermic areas on the neck which were discrete and removed from the original area. These lesions may have been the result of inadvertent contact or may have been due to other factors.

No cases of true sensitivity were encountered. In a few cases treatment was interrupted because of irritation following one of several bases used, but was resumed in a few days without ill effect. No symptoms of systemic absorption were noted.

Some pertinent histologic observations were made on biopsies before and after treatment. The sections were treated with dioxyphenyl alanin (dopa) for demonstration of the enzyme concerned with the melanin formation and with silver for better visualization of melanin granules present.

The comparative count of the melanocytes did not vary on the before and after specimen. The characteristics of these cells were not affected. The after specimen showed less intensity in its staining qualities when treated with dopa. Under the silver stain the melanin granules were seen shedding with the keratin.

**A product of the P. B. Elder Company, containing eight-methoxypsoralen, one of the active ingredients of Ammi majus L.

Discussion

Twenty cases were treated, fifteen of which showed excellent results. The result was fair in two, poor in three cases.

The lower concentration of the drug was found more useful, the higher concentration being reserved for the more stubborn cases.

Forman[4] in 1953 reported a case of hyperpigmentation treated with the 5 per cent concentration of the monobenzyl-ether of hydroquinone with good results. Denton et al[2] in 1952 demonstrated by patch test that the higher the concentration the more rapid the depigmentation. In this series care had to be exercised in the use of the drug so that the proper amount of depigmentation would be obtained. It has been stated by Lerner and Fitzpatrick[3] that in the white skin only the hyperpigmented areas were affected but in the Negro the normal skin could also be affected. The latter statement was borne out in my material.

The histologic appearance of the melanocytes as to number and morphology were the same before and after treatment. The only difference observed was a less intense dopa reaction in the treated skin suggesting some interference with the oxydative enzyme. The action by which Benoquin depigments has not been completely worked out but Denton et al[2] demonstrated with *in vitro* studies that there was a blocking action in some of the steps of melanization. Oliver et al[1] in quoting Muller's report stated that skin depigmented by monobenzyl-ether of hydroquinone gave a negative dopa reaction. This probably refers to skin completely depigmented.

Summary

1. Benoquin, an ointment containing monobenzyl-ether of hydroquinone is useful in the treatment of epidermal hyperpigmented lesions.

2. The treatment is best started in a low concentration (5 per cent). Higher concentration should be reserved for unusually stubborn cases.

3. Care must be exercised as to frequency and method of application, otherwise excessive loss of pigment may occur.

4. No cases of true sensitization were seen.

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Transmetatarsal Amputation in Peripheral Vascular Disease

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SINCE 1944 McKittrick and his coworkers have used the transmetatarsal amputation in the treatment of carefully selected patients with gangrene limited to toes. Although these authors have demonstrated in a significant number of cases that the procedure is generally successful, there is still much debate as to its real value. It is apparent that many surgeons dealing with peripheral vascular disease have had no experience with this operation and hesitate to try it. There are many who still feel that an amputation above or below the knee is indicated for the treatment of arteriosclerotic gangrene of toes. Others, such as Pratt and Samuels, feel that the transmetatarsal amputation has little to offer, since it can be successful only in those patients who can be adequately managed by limiting therapy to the involved toes.

At the Dearborn Veterans Hospital, since 1947 all amputations have been performed on the Orthopaedic Service. Those patients with complications of peripheral vascular disease are seen by both the Surgical Peripheral-Vascular Service and the Orthopedic Service, and the combined treatment program is outlined. We have been using the transmetatarsal amputation since 1950 in the belief that, as the medical and surgical treatment of peripheral vascular disease improves, patients live longer and all amputations become more successful; moreover, we believe that long-term function is a primary consideration. It is our feeling now that, in properly selected patients, the transmetatarsal amputation results in an excellent functioning extremity, with relief of symptoms, and that it often prevents a more disabling amputation at a higher level.

In peripheral vascular disease, gangrene results either from sudden occlusion of a major vessel, or from a mild precipitating factor in gradually progressive peripheral insufficiency. The common precipitating factors are exposure to heat, cold, or trauma, and infection following trimming of corns or nails, or epidermophytosis. We are concerned with this second group of patients. In that group it is recognized that the patient has a generalized disease and that, once gangrene develops in one toe, he is likely to have repeated episodes, with involvement of both feet, and with frequent periods of hospitalization. Gangrene and infection beginning in the toes is frequently progressive, spreading to the dorsum of the foot or along the plantar aspect of the foot and finally requiring a major amputation.

For these reasons it appears that, in properly selected patients with gangrene limited to toes, removal of all the toes is indicated both as treatment for the presenting disease and as a prophylactic measure.

We have now performed thirty-three transmetatarsal amputations for gangrene with results which parallel those of McKittrick and his associates. On the basis of that experience we would like to discuss the proper selection of patients, the preoperative preparation, the operative technique, and the postoperative care, with a few additional remarks on the rationale of treatment. It is hoped that there will be a more widespread use of this operation.

According to McKittrick and his coworkers, the operation is indicated for gangrene of all, or a part, of one or more toes, providing the gangrene and infection are stabilized and do not involve the dorsal or plantar surfaces of the foot. They also include those patients who have stabilized open infections in the distal portion of the foot, if the entire lesion can be excised and primary closure can be obtained. They emphasize that it is diffi-

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This paper is a shortened and revised version of an article published in the *Journal of Bone and Joint Surgery* in December, 1954.

Reviewed in the Veterans Administration and published with the approval of the Chief Medical Director. The statements and conclusions published by the authors are the result of their own study and no not necessarily reflect the opinion or policy of the Veterans Administration.

cult to determine the possibility of success in a foot with deficient circulation on any basis other than clinical judgment. In general, the poorer the circulatory and nutritional status of the foot, the less chance there is of success. However, the absence of palpable pulsation below the iliac or femoral artery is no contraindication to this operation. The special diagnostic measures used in peripheral vascular disease have been of no material benefit. If the skin on the dorsum of the foot is warm and has good nutrition, success can be expected. Many patients fall into a borderline category and must be advised that the possibilities of healing are questionable. However, there are many patients with healed transmetatarsal stumps who preoperatively had no pulsation below the femoral artery and who had cool, shiny, thin skin on the dorsum of the foot. Success has not been seen in cases in which there was discoloration on the dorsum, except for redness from inflammatory changes.

The preoperative period of preparation is considered to be the most important factor in determining success. During that period of two to three weeks, the patient is restricted to bed rest with the extremity flat in bed, and with the head of the bed elevated a few inches. It is hoped that this rest will decrease the circulatory requirement, prevent additional trauma, allow the control of infection, and prevent the extension of gangrene. Transmetatarsal amputation is indicated for those patients whose gangrene is stabilized and not progressive.

During the period of preparation, the control of infection is an important problem. The presence of infection should be assumed in all patients, including those who have been classified as having "dry gangrene" or ischemic necrosis. It is always possible, in these mummified toes, to demonstrate that at the line of demarcation there is a break in the skin, and in most cases there is a small amount of pus. In these patients, unless suitable precautions are taken, infection is introduced. Therefore, all patients are given antibiotics, and loose sterile dressings are worn at all times. The sterile dressings are removed once or twice daily for a fifteen-minute foot bath in tepid water to which some white soap has been added. The foot baths are used to promote drainage and to allow a gentle débridement. In the foot bath, necrotic tissue which is spontaneously separating can be removed with forceps and scissors, but viable tissue should never be touched.

Infection as a major problem is usually found in the group of diabetics with arteriosclerosis. There may be gross spreading infection, particularly along the tendon sheaths in the plantar aspect of the foot, requiring amputation of a toe or a wide incision and drainage, including the removal of the toe and its metatarsal. Only when infection has been completely controlled and it is obvious that there is no progression of gangrene, can the transmetatarsal amputation be considered.

Several important points in the operative technique must be considered. The amputation level is just proximal to the metatarsal heads, so that at the conclusion of the amputation, for all practical purposes, there is only bone between dorsal and plantar layers of skin and subcutaneous tissue. A more proximal level would pass through the deep structures of the foot, including relatively ischemic muscle. The dorsal incision begins midway between the dorsal and plantar surfaces on either side, and with one sharp incision down to the bone it is continued in a straight line across the dorsum to the mid-point on the opposite side. This is at the level of bone amputation, no dorsal flap being formed. The plantar incision begins at either end of the dorsal incision and parallels the proximal flexion crease of the toes, but runs one centimeter proximally to the flexion crease. This incision likewise must be sharp and directly down to bone. The long plantar flap thus obtained is dissected back to the level of bone amputation. The metatarsal heads, beginning with the first, are then removed with a saw. The saw blade is allowed to rest against the previously cut metatarsal, which serves as a guide, so that an even stump is formed. The plantar tendons and sesamoids are then removed at the bone level. The closure is made preferably in one layer with non-absorbable suture. As atraumatic a technique as possible is mandatory. At no time should the skin margins be touched with forceps. Tissues should be handled lightly with the fingers and a moist gauze sponge. Also, the closure should be meticulous, leaving no dog-ears, as these will slough out. A large bulky dressing is applied to the whole foot and ankle, with gentle pressure. Since these feet will not tolerate much pressure, the skin over the malleoli and the base of the fifth metatarsal should be carefully padded, and adhesive tape should never be placed directly on the skin.

After operation the patients return to strict bed rest, with the head of the bed slightly elevated. At least half of the sutures should remain in place for two weeks. Buerger's exercises are begun ten days to two weeks after operation, in preparation for ambulation at three weeks; by that time, healing is usually complete if it took place by primary intention. The patient at first walks with loose slippers until all swelling has gone and then wears his usual shoes. The toe is stuffed with wool or cotton and a thin piece of spring steel is placed between the layers of the sole. Some patients have preferred to remove the spring steel. The final gait is excellent at a moderate walk, but a limp appears with increasing rates of movement.

Deformities from unbalanced musculature do not develop in the stumps, and they will stand up well under use. While we have adequate follow-up studies on the series to be reported here, the figures of McKittrick and his associates[1] are more significant. They reported on a group of diabetic patients followed for as long as fifty-seven months. Of 146 patients who left the hospital with healed stumps, ulceration recurred in only twenty-four (16 per cent), and only six of these had amputation at a higher level. They reported that, of 202 patients followed, 135 (67 per cent) had satisfactory results; thirty-two (16 per cent) had unsatisfactory results; (they were ambulatory, but with incomplete healing or recurrence of ulceration); and thirty-five (17 per cent) had failures (with progressive difficulty and amputation at a higher level).

Using the technique described, we have performed thirty-three amputations on thirty patients with peripheral vascular disease. Of these, five were for thromboangiitis, eight for arteriosclerosis, and twenty were for diabetes with arteriosclerosis. Ten patients had primary healing; fifteen had secondary healing; two still have small granulating areas which are expected to heal; and six were failures which have required reamputation. It is believed, however, that, no matter what criteria are used for selecting patients, there will still be some failures. Moreover, it is probably true that, unless there is a certain percentage of failures in any series, not enough transmetatarsal amputations are being done. The patients and his relatives should be informed that failure or delayed healing is a definite possibility and, unless the patient and the physician are prepared to deal with these complications, the operation should never be attempted.

The two most common causes of delayed healing are marginal necrosis of the wound edges and wound infection. We include with marginal necrosis the sloughing of dog-ears and extension of gangrene to the dorsum of the foot. With wound infection we include minor stitch abscesses and gross wound infection. The wound complications should be treated in the same fashion in which the foot was prepared for surgery, that is, with antibiotics, sterile dressings, and daily tepid soaks, allowing for drainage, spontaneous separation of necrotic material, and healing by granulation tissue. We feel that surgical removal of eschars, secondary closures, and skin-grafting should be avoided.

In consideration of specific factors which contribute to success or failure, an attempt was made to correlate palpable pulsation in the extremity and the rate of healing. Only three patients had palpable pulsations in the foot. Most of the failures and those with unduly prolonged healing are in the group with no pulsation below the femoral artery. While it is obviously true that the poorer the circulation, the less chance there is of healing, success or failure cannot be determined on the basis of palpable pulsation. McKittrick and his associates emphasized that there are frequent surprises in both directions. Success or failure is probably determined by the extent of collateral circulation which has developed and there is no accepted method of determining that collateral circulation except the purely clinical. None of the objective methods has been so successful as inspection of the leg for the color and nutrition of the skin and subcutaneous tissues, palpation for warmth, and clinical experience.

Although little work has been done on the problem, there is some experimental evidence and much clinical evidence that the transmetatarsal amputation takes great advantage of the collateral circulation as it develops in the leg. Injected specimens, such as were illustrated by McKittrick and Root, as well as some of our own, suggest that there are areas where collateral circulation develops with ease and others where it is virtually impossible. It is felt that there are few, if any, collateral vessels in the toes, the dorsum of the foot, and along the anterior aspect of the leg. On the other hand, there may be many fine collateral vessels in the plantar subcutaneous tissue. When

postoperative gangrene is seen after amputations for peripheral vascular disease, it is almost always confined to the dorsum of the foot in the transmetatarsal amputations and amputations of single toes, and to the anterolateral skin flap in the below-the-knee amputation. A great part of the success of the transmetatarsal amputation is due to the use of a long plantar flap of skin and subcutaneous tissue without a dorsal flap. Likewise, the amputation is performed far enough distally so that the deep structures of the foot are not involved.

It is the authors' belief that with the material available in this study we cannot evaluate the role played by lumbar sympathectomy in the final results. The series is too small, and the records of the response to sympathectomy are too inaccurate. According to our clinical observations in this type of patient, it did not influence the final outcome. Warren and his associates reported similar observations. There was, however, no extension of gangrene which could be attributed to lumbar sympathectomy. Since there have been no complications of sympathectomy, and there has been no accurate method of preoperatively evaluating the postoperative response, the operation has been recommended whenever it was felt that any degree of response might follow. It is possible that many of the good results are in part due to increased peripheral blood supply following lumbar sympathectomy.

Sympathectomy in the past has been recommended as a means of controlling rest pain. It has been well established that in many cases of intermittent claudication the response is dramatic. In this series we were concerned, however, with persistent pain in the toes with or without an open, infected lesion. In five of these patients such pain was a major complaint and in no case did sympathectomy relieve the pain. On the other hand, all five were completely relieved following transmetatarsal amputation when the wound was completely healed. It is believed that pain in these patients is due in large part to involvement or peripheral nerves by fibrosis and acute inflammation.

From the combined experience of those who have used the transmetatarsal amputation in peripheral vascular disease it is apparent that it is possible in a high percentage of patients to obtain well-healed stumps. In any discussion of the use of this type of amputation three specific criticisms can be made. The authors feel that these criticisms should be mentioned and discussed briefly.

First, it is believed by some that using a conservative amputation merely delays the inevitable amputation at a higher level. In the present series there were only six reamputations.

The second criticism is that many of the patients suitable for transmetatarsal amputation need only removal of the involved toes. Yet, if treatment is limited to the involved toes, several months are frequently required for complete healing. After this treatment, gangrene may at any time develop in the remaining toes, the most vulnerable part of the extremity. In such episodes it may not be possible to prevent the spread of gangrene and infection to the foot, or, therefore, to prevent a major amputation.

The third criticism is that for some patients too long a time is required for delayed healing, resulting in great economic loss and delay in rehabilitation. In this group of thirty-three amputations, there were seventeen instances of delayed healing (52 per cent of the total). In most cases the patients were ambulant and might have been outpatients after two months. In this group only five stumps have required longer than seven months to heal satisfactorily, and in each of these there was some reason for feeling that prolonged treatment was justified.

It is unfortunate that this serious disease occurs primarily in elderly people. There is always bilateral involvement and, in the event of bilateral high amputations, these patients do not successfully wear prostheses and a wheel-chair existence results.

It is the authors' impression that the more widespread use of the transmetatarsal amputation will prolong the productive lives of many patients.

Note: The authors wish to thank Mr. Earl Bartlett, medical photographer at Dearborn Veterans Hospital, who took the photographs used to illustrate this paper.

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Acute Leukemia in Adults

Treatment with the Combined Use of ACTH or Cortisone and 6 Mercaptopurine

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Lawrence Berman, M.D.
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THE results of treatment of acute leukemia with 6 Mercaptopurine (6MP)* have been analyzed by Bross,[1] who found that in 156 adults there were twenty-three (15 per cent) remissions. The remission rate of 36 per cent in a series of childhood patients was significantly greater. Tivey[2] compared the survival times of untreated adults with acute leukemia with those of a series of patients treated by Burchenal[3] with 6MP; the median survival time among 179 patients untreated was approximately 3.3 months from onset of symptoms to death, whereas among fifty patients treated the median survival time was over six months. Most patients with acute leukemia have been treated sequentially with various methods. The majority received ACTH, cortisone or antifolic acid derivatives at one time or another during the course of the disease. In addition, the liberal use of blood transfusions and antibiotics, whose beneficial effects are well known[4] was employed in most instances. However, little or no mention was made of the combined use of ACTH or cortisone and 6MP. Some authors[5,6,7] cite a few cases in which this combination was used, and they imply that the combination was beneficial; it was thought that one drug may potentiate the other. Since January, 1954, we have observed five instances of acute leukemia in adults in which ACTH or cortisone and 6MP were used simultaneously. It is the purpose of this communication to describe the effects of the combined therapy of acute leukemia in adults.

Methods

All patients were adult males between the ages of nineteen and forty-six years. With the exception of patient No. 5, none had received anti-leukemia drugs or hormone therapy prior to admission. Two patients had received blood transfusions and antibiotics prior to admission. Two and one half mg per kg. of 6MP were given orally until a satisfactory remission or severe toxicity resulted. ACTH** in a total amount of 120 USP units daily was given intramuscularly in divided doses, or cortisone was given orally in a dose of 300 mg. daily. Steroid therapy was administered in this manner for two to four days, and then the dose was decreased gradually, depending on side effects and therapeutic results. Potassium chloride and a low sodium diet were given to each patient.

Results

Remissions were classified as clinical or hematologic remissions, according to criteria stated by others.[3,5] A complete hematologic remission was indicated by a return of the peripheral blood and bone marrow to a normal appearance. A satisfactory hematologic remission was defined as a return of the peripheral blood picture to normal, and with less than 25 per cent abnormal stem cells in the bone marrow. An incomplete hematological remission was indicated by the persistence of a small percentage of abnormal stem cells in the peripheral blood and not more than 50 per cent such cells in the marrow. A clinical remission was the disappearance of toxicity, fever, and anorexia together with a decrease in the size of diseased organs, disappearance of hemorrhagic phenomena and a return of the patient's ability to engage in normal activities. Failure of therapy was characterized by absence of change in clinical or hematologic status, or the failure of therapy to bring about improvement of the degrees defined above.

The following case reports indicate the clinical and hematologic changes observed in our patients.

From the Departments of Medicine and Pathology. Veterans Administration Hospital, Dearborn, Michigan, and Wayne University College of Medicine.

Presented at the regional meeting of the American College of Physicians in Detroit, December 3, 1955.

*6 Mercaptopurine (Purinethol) produced by Burroughs-Wellcome Company.

**Acthar-gel, Armour & Co.

Details of the findings in the bone marrow will be discussed separately in another communication because of their special interest.

Four of the five patients had clinical remissions.

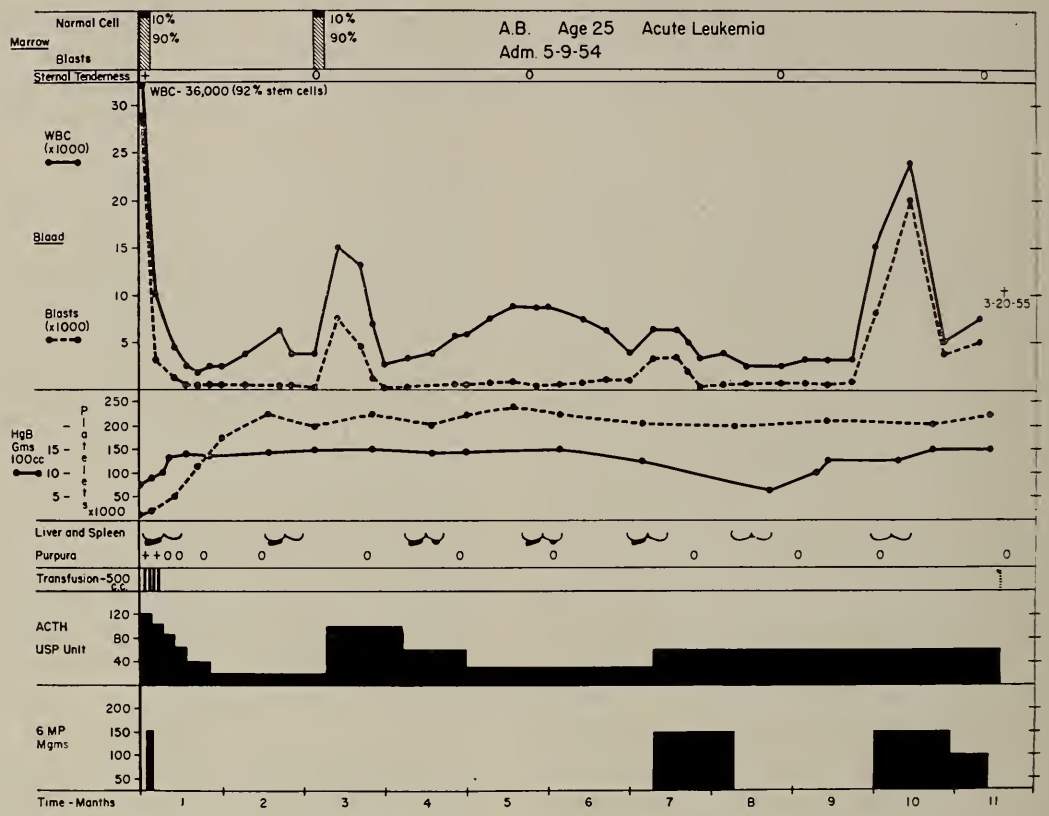


Fig. 1. Clinical and hematological course (Case 1).

Their improvement justified a release from the hospital and resumption of normal activities. Among the four patients there was a total of thirteen hematologic remissions, either complete, satisfactory, or incomplete. The life span of the five patients since onset of symptoms has been seven, eleven, fourteen, seventeen and twenty months, respectively. Three patients are still alive and well, eleven, seventeen and twenty months after the diagnosis of acute leukemia was established. One patient (Case 2) is still enjoying a complete remission twenty months after the time of diagnosis of acute leukemia. No examples of severe toxicity were encountered during treatment. The usual side effects of steroid therapy were seen but it was never necessary to decrease the dosage of the drugs.

Case Reports

Case 1.—A twenty-five-year-old white man was admitted to the hospital in May, 1954, because of weakness of three months' duration. Examination revealed pallor, sternal tenderness, slight purpura and hepatomegaly. Hematologic data (Fig. 1) showed anemia and thrombocytopenia. The initial leukocyte counts were between 30,000 and 36,000 per cu. mm., with 92 per cent undifferentiated stem cells. Bone marrow study showed a greatly elevated ratio of leukocytic elements and there were over 90 per cent undifferentiated stem cells. Treatment was begun with 120 USP units of ACTH and 130 mg. of 6MP daily. There was a precipitous fall in the counts of total leukocytes and stem cells within a week. The counts reached a low point of 200 per cu. mm. for the total leukocyte count and for this reason the use of 6MP was interrupted but the use of ACTH alone was continued. There was a concomitant sustained rise in hemoglobin levels and platelet counts. The patient became afebrile and gained 12 pounds. Physical findings became normal and the patient could be discharged from the hospital. A hematologic relapse occurred within three months but it was controlled by increasing the dose of ACTH. A second hematologic relapse occurred in the seventh month and this was controlled by ACTH plus 6MP. In the tenth month of the disease a third hematological relapse was observed; this also disappeared when the combined therapy with ACTH and 6MP was resumed. During the third remission the patient was readmitted with the onset of pneumonia; he expired six hours later. Autopsy revealed extensive pneumonia and leukemic masses in the middle and anterior mediastinum and extensive pericardial leukemic infiltrations.

Comment.—This case represents an excellent temporary clinical remission of acute leukemia and a con-

tinuous incomplete hematologic remission with three distinct relapses which were controlled by the combined therapy.

Case 2.—A thirty-one-year-old white man was admitted in February, 1954, with pneumonitis of the lower lobe of the left lung. He recovered rapidly with penicillin therapy but had been found to have leukopenia and anemia when he was admitted. There were no abnormal cells in the peripheral blood but the bone marrow smears contained 80 per cent undifferentiated stem cells. Treatment was begun with ACTH and 6MP. There was a sustained rise in hemoglobin and a return of leukocyte counts to normal levels (Fig. 2). A few stem cells appeared in the peripheral blood. After one month the patient could be discharged from the hospital. A hematologic relapse occurred in the sixth month of the disease. At this time ACTH therapy was resumed in full dosage of 40 mg. every six hours. After a short course, the dose was gradually decreased after which there was a steadily improving hematological response. At the time of this writing, twenty months later, the patient remains in complete clinical and hematologic remission.

Comment.—This is an instance of acute leukemia in which there was a rapid response to combined therapy with ACTH and 6MP. One hematological relapse was easily controlled by ACTH. Fifteen months after the diagnosis of acute leukemia was established the bone marrow appeared normal. Up to now the excellent clinical remission has persisted for twenty months.

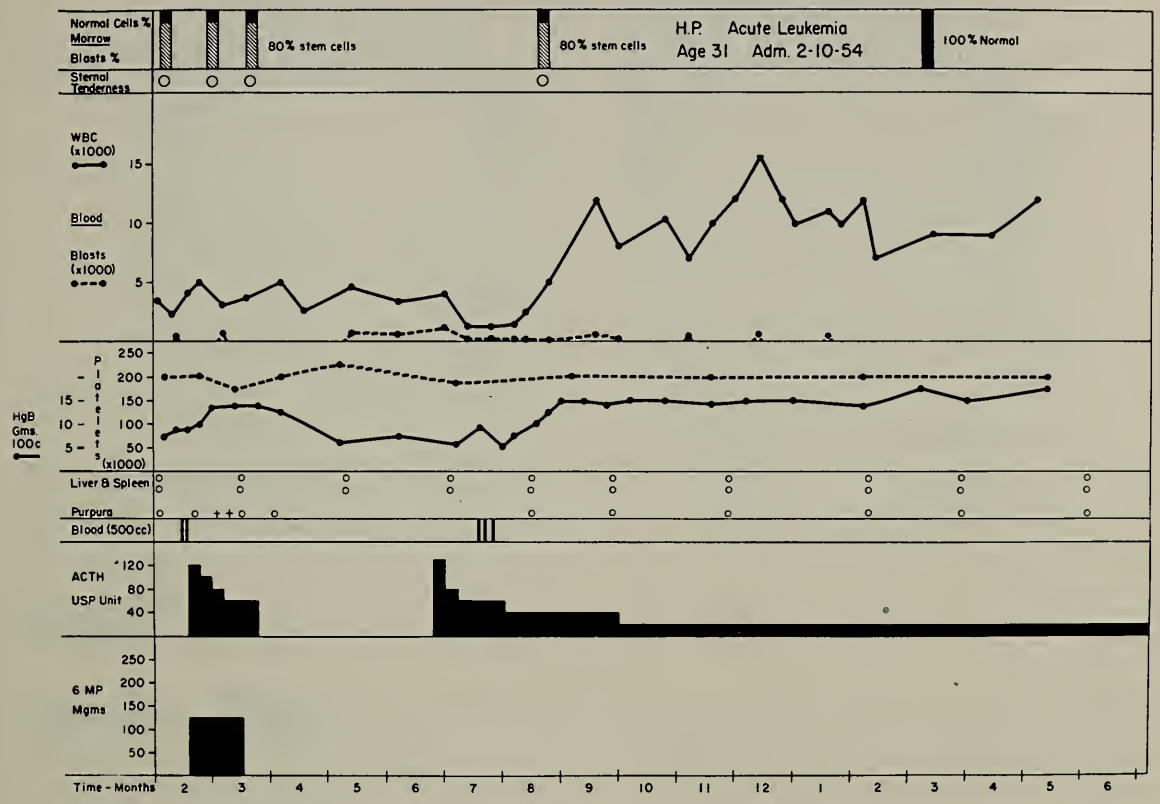


Fig. 2. Clinical and hematological course (Case 2).

Case 3.—A forty-three-year-old white man was admitted to the hospital in February, 1954, with anemia, fever, enlarged cervical lymph nodes, severe generalized purpura, bleeding gums, and ulcers in the oral region. A diagnosis of acute monocytic leukemia of the Naegeli type was established. Surprisingly, the patient had experienced a complete clinical and hematologic remission following a course of nitrogen mustard therapy (28 mg. over a period of four days). The patient was discharged and followed in the out-patient clinic. Nine months after the diagnosis was made it was noted that there was an increase of monocytes in the peripheral blood; a month later monoblasts and myeloblasts appeared. A second course of treatment with nitrogen mustard had no effect. During the next month anemia recurred; this was followed by thrombocytopenia, weight loss and the appearance of ulcerative lesions in the mouth. The leukocyte count began to rise and there was a concomitant increase of stem cells to levels of 15,000 to 20,000 per cu. mm. At this point the patient was treated with 6MP alone. This resulted in partial hematologic and clinical remissions (Fig. 3). He was not given ACTH because of a quiescent infiltration in the apex of the left lung. Bilateral sinusitis associated with Ludwig's angina occurred in the fifteenth month of his disease and he was readmitted for therapy. The patient's condition appeared terminal; there was a leukocyte count of 77,000 per cu. mm. with 90 per cent monocytoid stem cells. Treatment included 6MP, Cortone†, blood trans-

†Cortone (Cortisone acetate) Sharp & Dohme Co.

fusions and antibiotics. Within three weeks there was an excellent clinical recovery. Hemoglobin levels and platelet counts increased and the leukocyte count decreased to 10,000 per cu. mm. with 5 per cent stem cells. The patient was then in a satisfactory hematologic remission, eighteen months after diagnosis.

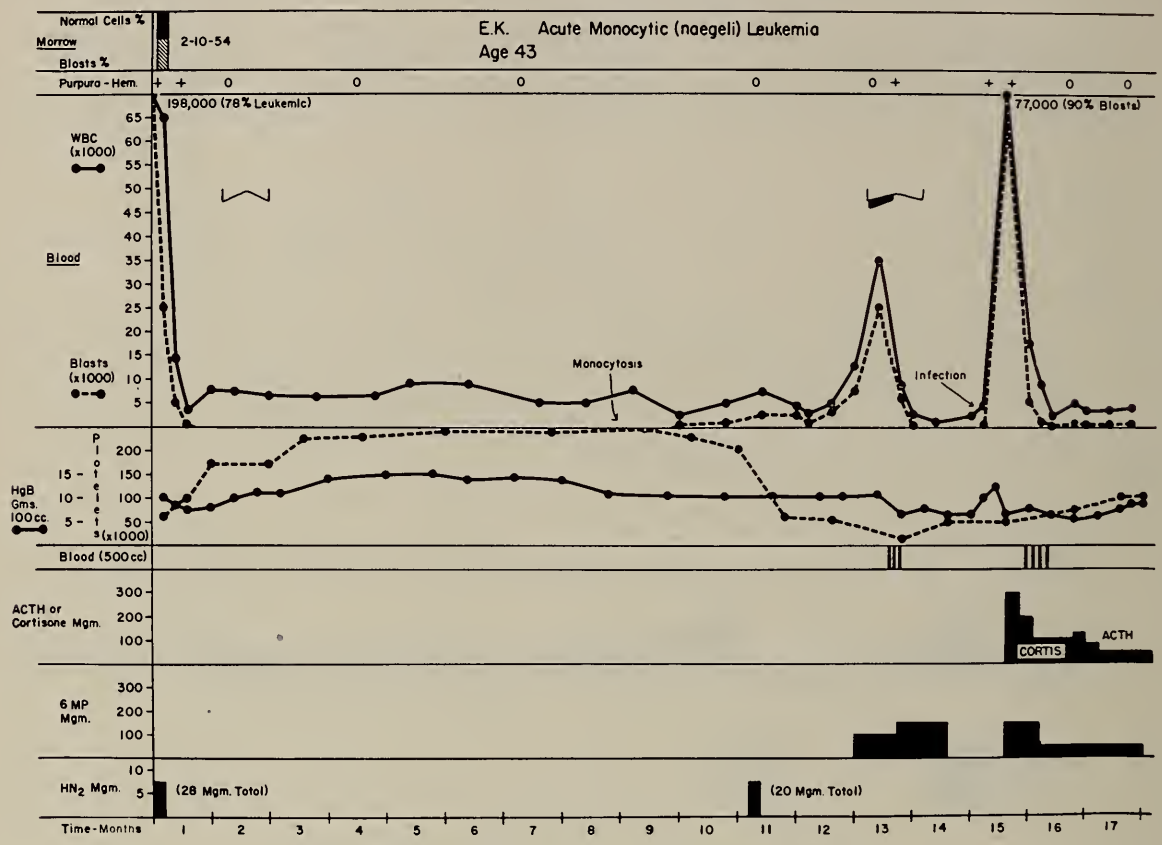


Fig. 3. Clinical and hematological course (Case 3).

Comment.—A patient with acute monocytic leukemia which is usually refractory to most forms of therapy made a surprising remission following treatment with nitrogen mustard but later failed to respond to a second course. He experienced a partial short remission after treatment with 6MP alone and later experienced a satisfactory remission with combined therapy (6MP plus Cortone).

Case 4.—A twenty-five-year-old service man became ill with pharyngitis and enlarged left cervical lymph nodes while on duty in Korea in January, 1954. He was found to have anemia, thrombocytopenia and a leukocyte count of 40,000 per cu. mm. About 50 per cent of the cells in the blood were designated as "blast cells." The patient appeared at our hospital three months later. He had not received therapy other than blood transfusions. Examination revealed pallor, small ulcerative oral lesions, a huge necrotic infiltrative lesion in the left periorbital area (Fig. 4) and another similar lesion on the right leg. There was no thrombocytopenia. Treatment was begun with 6MP alone but combined therapy with the addition of ACTH was soon instituted because of the poor condition of the patient. After three weeks of combined therapy there was marked improvement in the clinical picture. There was increased appetite with weight gain, decrease in the extent of the necrotic infiltrative lesions (Fig. 5) and this was accompanied by rapid improvement in the hematologic status (Fig. 6).

Comment.—A patient with acute leukemia with extensive skin involvement progressed slowly toward a remission after treatment with 6MP alone. Combined therapy resulted in a more rapid clinical remission. The hematologic picture to date can be classified as an incomplete remission.

Case 5.—A nineteen-year-old service man was hospitalized because of fever, epistaxis and enlarged cervical lymph nodes. In a service hospital it was found that the patient had anemia, thrombocytopenia and an acute leukemia blood picture. There were 80 per cent stem cells in the peripheral blood. The patient was treated with cortisone and blood transfusions with slight improvement of the anemia, but the leukemic picture became worse, i.e., there was an increase of stem cells. Three months later he was transferred to our hospital. At this time the patient had enlarged cervical and inguinal lymph nodes, hepatomegaly, sternal tenderness, and pallor. Bone marrow study showed 92 per cent stem cells, mostly of a lymphocytoid variety. Administration of 150 to 200 mg. of Cortone daily was continued and 6MP was added in doses of 125 mg. daily. There was

an improvement in the peripheral blood picture; the stem cells decreased in number. The clinical course became progressively worse and was characterized by repeated epistaxis and enlargement of the spleen. Acthar-



Fig. 4. Appearance of infiltrative lesion of left periorbital region on admission to the hospital (Case 4).



Fig. 5. Appearance of infiltrative lesion of left periorbital region after treatment (Case 4).

gel was substituted for Cortone without clinical effect and the patient expired six months after the diagnosis of acute leukemia was established.

Comment.—This represents an example of acute leukemia, probably of lymphocytic type, which was not affected by combined therapy with 6MP and ACTH or cortisone. There was an incomplete hematologic response shortly before death.

Discussion

The beneficial effects of 6MP, ACTH and cortisone in the treatment of acute leukemia in some adults have been reported.[3,5,6,8,9,10] In most instances these agents were used singly or sequentially during the course of the disease. As a patient became refractory to one, another drug was used in the hope of obtaining a second remission. It has been stated that remissions of acute leukemia of adults who have been treated with steroids or 6MP have been of short duration.[3,5] It has been pointed out that the action of 6MP is unfavorably slow, requiring periods of three to eight weeks for practical effects to take place.[5] In the hope of overcoming these limitations we have employed a combined therapeutic regime of steroids and 6MP for acute leukemia of adults. As seen from the case descriptions, our patients were gravely ill at the time treatment was instituted. It is our impression that four of the five patients experienced more rapid and more prolonged remissions than we have observed previously with other

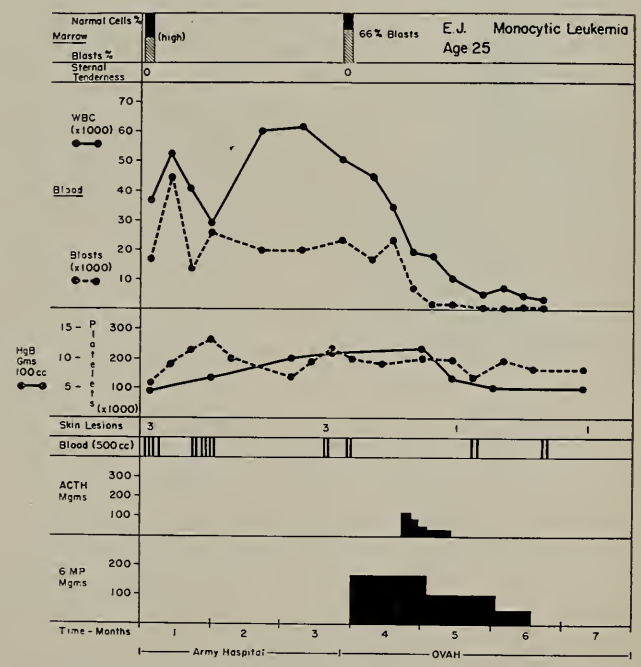


Fig. 6. Clinical and hematological course (Case 4).

forms of treatment. When favorable results occurred, there was rapid control of purpura, fever, anorexia and general debility within one to three days. The prompt effects are probably related to the steroid therapy, whereas the subsequent pro-

longed hematologic effects may be related more to the effect of 6MP. In four instances decrease or disappearance of stem cells and improvement of anemia appeared more rapidly than would be expected from the use of 6MP alone. Remissions in most instances were prolonged and one patient is still in complete hematologic and clinical remission after nearly two years. The median survival time of thirteen months in the five patients, including the one who is still in excellent remission, is at least a favorable manifestation of therapeutic results in the treatment of acute leukemia of adults.

Summary

1. Five adults with acute leukemia were treated with a combination of ACTH or cortisone, and 6MP, each in full dosage.

2. The treatment was well tolerated and in no instances was there any need to discontinue treatment because of toxic effects.

3. Four of the five patients experienced complete clinical remissions. Four patients had a total of thirteen complete, satisfactory, or incomplete hematologic remissions.

4. The remissions appeared to be more sustained than would be expected had each drug been employed alone.

5. Three patients have survived for ten months, seventeen months, and twenty months, respectively, after the diagnosis was established. At the time of this report these patients are still living.

6. The combination of ACTH or cortisone, plus 6MP for the treatment of acute leukemias of adults may be more effected than treatment with either of these agents alone.

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PIGMENTED SKIN LESIONS

(Continued from Page 304)

5. The melanocytes remain constant as to number and morphology. Depigmentation is due to temporary interference with melanin formation and gradual shedding of preformed pigment.

Acknowledgments

Consultation and helpful suggestions given by Dr. Hermann Pinkus of the Department of Dermatology are gratefully acknowledged. Dr. Renato Staricco, Fellow in the Department, prepared the histologic specimens.

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President's Message



Why the $10 Assessment?

Two reasons for this year's assessment were given by the 1955 House of Delegates: (a) to bolster the Society's General Fund; and (b) to build a necessary reserve for an emergency such as faced Medicine in 1948 (Wagner-Murray-Dingellism).

In recent years, the Society's expanding program markedly increased the expenditures in the General Fund (which includes Administration and General, Society Activities, and Committee Expense). MSMS is primarily a service organization; more services require more money. For two years, 1952 and 1954, the General Fund ran in the red. In 1955, the General Fund ended in the black ($4,100) only because The Council allocated $5.00 of every member's dues from the Public Relations account to the red-faced General Fund. In 1955, Public Relations ran on $15.00 per member only by postponing several important and approved projects. This—in the face of constant attacks being made against the medical profession—is poor business. Socialized medicine is NOT dead; we are still surrounded by those who would substitute it for our time-tried method of private medicine from which the glories and achievements of Medicine have come.

The 1956 budget allocates $28.50 of each member's dues and assessment to the General Fund, $6.25 to Public Education, $3.50 to Public Service, $5.25 to Professional Relations, $5.00 to Public Education Reserve and the balance to Building Fund ($2.00), Journal ($1.50), and Contingent Fund ($3.00).

The Council anticipates that several major projects, delayed in 1954 and 1955 for lack of funds, can be completed in the current year. The reserves for public education will reach approximately $55,000 by the end of 1956—which is a surplus not adequate, however, to win a major battle (almost $100,000 was necessary the last time).

A reserve sufficient to continue operations for *two years,* without a cent of revenue being received, is recommended by wise fiscal counselors as good financing for an association such as the Michigan State Medical Society. Some medical societies have reached that safe status. But even with this year's $10.00 assessment, the MSMS funds are far from that goal.

W. S. Jones.

President, Michigan State Medical Society

P.S.: Peruse the Auditor's Report and the Budgets in this number.

Editorial

DEDICATION

We take great pleasure in dedicating this March number of THE JOURNAL to Wayne University College of Medicine, not because there is a particular anniversary, but because the Publication Committee and the Council recognize that Wayne University College of Medicine is serving a tremendous need in medical education in the State of Michigan.

Within the near future, Wayne University will no doubt become a state institution. A bill to accomplish this purpose has already been introduced in Lansing.

In this issue of THE JOURNAL, we are presenting a group of especially prepared articles which well illustrate the advanced research work being done at this school.

THE PRESIDENT'S HEALTH PROGRAM

President Eisenhower, on January 26, 1956, presented to Congress his annual Health Program for the nation. He proposed a substantial increase of Federal funds for medical research. "Progress in medicine," he said, "is dependent on research. Antibiotics in ten years have reduced appendicitis 69 per cent, rheumatic fever 66 per cent, and polio in only one year has materially decreased in its threat to our children." He recommends $126,525,000.00 for the National Institute of Health (a 28 per cent increase) of which he suggests special amounts for cancer, heart disease, mental illness, arthritis and metabolic disease, neurology and blindness, infectious and parasitic disease, and dental disorders.

"The bulk of medical research is conducted in laboratories of universities, hospitals and other institutions outside of the Federal Government," therefore he proposes a five-year grant for construction amounting to $250,000,000.00 "to assist in construction of research and teaching facilities in schools of medicine, osteopathy, public health, and dentistry and other research institutions. These institutions would be required to supply at least equal amounts in matching funds."

Health Personnel

"The rate at which physicians are being graduated from the Nation's medical schools is barely keeping pace with the increase in population. There are serious shortages in such fields as psychiatry, pediatrics, and in physical medicine and rehabilitation. The program of construction grants for medical research and teaching facilities also offers the opportunity for medical, dental and other professional schools to expand their student capacity and provide for the training of more physicians, scientists, dentists, and other health workers."

Meeting the Costs of Medical Care

Since World War II, the costs of medical care have been increasingly met through voluntary health insurance. More than 100 million persons are now enrolled in prepayment health insurance plans of some type. But health insurance coverage is still not available to many who need it, and the character and amount of insurance protection in important respects remains inadequate.

"Health insurance protection must be more available to older persons, and those living in rural areas, to the self employed and those working in small organizations who cannot be reached by ordinary group enrollment."

In Michigan, small groups with as few as five persons, are eligible for enrollment. Persons up to sixty-five are eligible in the community enrollments which are held each year. Oldsters in groups are taken regardless of age and Michigan Hospital Service and Michigan Medical Service have a great number of Grange and other rural groups enrolled. Many more could be accommodated. The community enrollment periods held each year are especially for the self-employed.

The President proceeds:

"The need for more and better health insurance coverage can best be met by building on what many of our people have already provided for themselves—the voluntary health prepayment plans. Much can be done to encourage more rapid expansion and improvement of such plans."

Reinsurance

"Last year and the year before, I urged the enactment of a proposal of Federal reinsurance to encourage increased protection against the costs of medical care through voluntary prepayment plans. Since the legislation was introduced, private insurance organizations have developed new types of policies, and prepayment plans have extended coverage to groups formerly unprotected. There are now indications that organizations writing health prepayment plans might progress more rapidly by

joining together—sharing or pooling their risks—in fields of special needs. The Administration is considering legislative proposals that would permit such pooling, but, if practical and useful methods cannot be developed along these lines, then I will again urge enactment of the proposal made last year."

Dependents

Illness and disability are among the principal problems of public assistance recipients, and are major causes of dependency. Therefore I again recommend that the Congress authorize a separate program through which the Federal Government would match funds expended by the States and localities for medical care for the indigent aged, the blind, the permanently and totally disabled, and dependent children.

"Additionally, I renew my previous recommendation for (a) providing Federal employes with the benefits of group health insurance, and (b) the improvement of medical care for the dependents of service men."

Obstacles to carrying out some of the President's proposals have been mentioned before and suggestions made to relieve them. The Post Office employes in Michigan would have been covered many years ago if the Government had allowed withholding privileges. The allotments to Blue Cross-Blue Shield, or even to Community Funds were prohibited. A minor Congressional amendment would correct that.

Some years ago, the Michigan Department of Social Welfare wished to care for the old age assistance, aid to blind, and dependent children, in a more satisfactory way than now prevails. Until now, allotments for medical care were made by adding a few dollars to the recipient's monthly check. He was *expected* to pay the doctor. The Department was concerned that many did not get the allocated treatment. Calhoun County was ready to accept what was then being expended, and distribute it to the doctors through the medium of Michigan Medical Service. We believed there would be more than enough to pay for all services actually rendered. The Federal Government vetoed the plan because the Michigan Department of Social Welfare cannot legally pay to the doctor or his representative. It must go through the patient. Correction of this quirk of usage would help in rendering medical care to the very people that interest the President.

Care of dependents of the service men can easily be done in the same way as the present Home Town Care of Veterans with service-connected disabilities. Negotiations are now in process to end that.

SOCIAL SECURITY

Again the problem of whether the medical profession should be included in the OASI must be considered. The House of Delegates of the Michigan State Medical Society in September, 1955, instructed all the county medical societies to take a poll of their membership to determine sentiment for inclusion in Federal Social Security. It is hoped this directive of the House of Delegates will be carried out in an endeavor to discover the actual feelings of the membership.

The American Medical Association has frowned upon the OASI and to date has succeeded in keeping our groups out of the compulsorily included list. There are a few (ministers, farmers) who may choose, but once having made their choice there is no return. It has been suggested that the medical profession be included as voluntary participants. The AMA has published statements to the effect that one could provide, better and more cheaply, the same benefits Social Security gives. Repeatedly the Administration, and especially the Department of Health, Education and Welfare, has hoped the medical profession would be made part of the whole program, but this year that is not in the President's expressed wishes, as given to Congress.

In order to give our members more complete data upon which to make a decision, the Editor has requested from a licensed insurance counsellor, a summarization of the pros and cons, giving an analysis and comparison of both private insurance and the OASI. The study is on page 358 of this number of The Journal. The Social Security representatives in Battle Creek were much interested when shown the study.

MEDICAL CARE AND RECORDS

Since December, 1950, the Michigan State Medical Society has been represented on a Medical Advisory Committee serving the State Department of Social Welfare. Other groups represented on the committee are the State Dental Society and the State Association of Osteopathic Physicians and Surgeons.

One of the functions of the Social Welfare Department is to assist in providing medical care for public assistance recipients. Medical care is defined as home or office treatment by licensed medical practitioners, and the Social Welfare Act provides that the private physician-patient relation-

ship shall be maintained. The agency's role is to provide an allowance for medical care in the grant of old age assistance, aid to the blind, aid to the disabled, or aid to dependent children. The client chooses his own physician and makes his own arrangements for care and payment.

Currently these assistance programs are serving some 143,000 persons, including both children and adults, throughout Michigan. Financing is by appropriations from the state general fund, with federal participation through grants-in-aid to the state.

Allowances for *chronic medical care* (i.e., in which the need for treatment will continue for three months or longer) may be included in the assistance grant only upon certification by the physician. (The blanks used for this report—Form SB-54, Verification of Need for Medical Care, have just been radically revised with the advice of Medical Advisory Committee. For clients who are not certified for chronic medical care, the grant may include a non-chronic medical allowance of $2.00 a month (will be raised to $3.00 a month beginning April, 1956) except for persons hospitalized or receiving convalescent care.

One of the most common faults in medical procedures is the inadequate or incomplete listing of medical diagnoses and medical services. The reports mentioned above, for example, go to the local bureau of social aid medical advisor, sometimes to the state medical advisor, to determine the need for medical care, the period of time required, and the estimated cost. The first important item is "Diagnosis." If the diagnosis is specific, with proper nomenclature, and with sufficient description to give the medical advisor a clear picture, the first duty of the examining physicians is complete. (Read over your next report and see if you could determine the exact condition sufficient to warrant allotment of funds for medical care.) From this report the advisor allots money which is paid to the patient each month, which he in turn is supposed to pay to the doctor. This may seem to be a cumbersome method, but it is required by state and federal law. However, direct payment to the doctor may be made for special diagnostic examinations, such as those for determining disability of the father in aid to dependent children cases, when authorized by the county bureau of social aid.

For several years the Social Welfare Department has been experimenting with a method for determining the chronic medical needs of public assistance clients on an "actual cost" basis. This method is now standard practice in fifty-five county bureaus of social aid, and by recent action of the Social Welfare Commission will be put into effect statewide beginning in April. This plan has proved less expensive in terms of the amounts included for medical care in assistance grants, yet it is believed the clients actually receive more medical care.

The "estimated cost" procedure still used in the other twenty-eight counties requires the client to get a new medical statement from the doctor at the expiration of the period originally indicated as the approximate length of time treatment would be required. Under the actual cost plan, these "renewals" are unnecessary. The patient merely keeps a record of his actual medical expenses on a blank furnished by the bureau for this purpose. This form, called SB-54A—Report of Medical Expenses, is to be signed by the doctor or other person in his office authorized to do so each time medical service is given. The doctor also lists on the form any drugs or other medical supplies which the patient must buy at the drug store. The pharmacist signs the form when such purchases are made at this store. These records are accumulated and turned in to the bureau each three months, at which time the medical allowance is reviewed and the future assistance grant adjusted on the basis of the actual cost report. After two three-month periods of reporting by the client, if the average monthly cost has stabilized—that is, if there is a difference not exceeding $5.00 (up or down) between the first and second period averages, the next reporting period may be extended to six months.

No adjustment in grant for changes in medical expenses can be made during the reporting period, unless there is such a marked change in the medical needs that a "new start" is necessary. It is only when a "new start" is essential that the patient must secure a current medical statement and estimate of future cost from his doctor.

The Department wishes the recipients to get (within legal limits) all the medical care needed. This reporting and cost reporting will assure the patient's going for and getting his care. It is hoped also to eliminate the many who may get allotments and never go back to the doctor until another allotment is needed, but who has used the money for other than medical care. All of these

patients will be able to get incidental medical care because each one is automatically paid $3.00 a month for miscellaneous medical care.

The basic need is the complete and well-stated diagnosis, including an estimate of the amount of care and length of care. This latter can be checked. What we have said about complete and accurate diagnosis also holds true in making reports to Michigan Medical Service. All medical and surgical reports go to a receiving desk where 70 per cent are automatically paid by clerks who know nothing about medicine. Seventy per cent of our doctors are making proper reports of services, but what about the other 30 per cent? Their reports have to be studied by specially trained personnel and then sent to the medical director. If he does not have sufficient information to make a determination, the Medical Advisory Committee gets the job; they spend many hours trying to interpret the report and frequently return it for clarification to the doctor who originally filled out the blank. Just a little more care is needed and an extra minute to reread the report with the question in mind, "Could I pass upon this information?"

If all our doctors, when making hospital records as well as medical reports, would follow through on this suggestion, we know the Hospital Records Committees would call them "Blessed," and we believe the question of accreditation might be much easier.

It used to be that medical record making was never mentioned in undergraduate schools, but in later years medical students should have absorbed sufficient "know-how." The American Medical Association has recently adopted a medical nomenclature and is holding instruction meetings in various far-away places. Michigan Medical Service, and the Michigan State Medical Society, however, have published a Fee Schedule for Government Agencies containing a satisfactory nomenclature with key numbers. One or two extra minutes of the doctor's time would save many headaches and much expense in at least three divisions of medical service.

That ordinarily safe therapeutic doses of morphine may be fatal in persons who are intoxicated was shown in 1952 by K. Möller (Copenhagen). At that time, he had recorded seven cases in which death followed the administration of therapeutic doses of morphine to patients with blood alcohol concentrations between 0.22 and 0.27 per cent—in themselves not at all dangerous. Möller assumed that there is an additive action of alcohol with morphine. He therefore warned against giving morphine or its derivatives to intoxicated patients.

MICHIGAN FEDERATED UNION MEDICAL PLAN

In the section, You and Your Business, page 236, is an item from one of several newspapers of Sunday, February 5, 1956, announcing a movement by Union officials to establish their own medical and hospital service plans. This it not a new threat. The Union leaders have used it many times in negotiations and conferences. The most recent was at the Michigan Hospital Service Board meeting which authorized the request for increased rates. Later, the Hospital Service Board and Michigan Medical Service Board at a joint meeting were told by these labor representatives that hospitals are making no effort to hold down costs; doctors are actually to be blamed for over-utilization because they send patients to and from hospitals; the medical plan is deficient in that it does not include diagnostic and preventive medicine and ambulatory home, office or out-patient hospital care.

All this is promised in the new Union plan. It offers complete hospital, medical and surgical care, the same as the do-gooders, labor administrators, Truman and Ewing were hoping to establish by a "National Compulsory Health Insurance." Truman says the greatest regret of his life is that he could not adopt what *"the doctors mistakenly called Socialized Medicine."* During the negotiations and hearings regarding the recent rate increase for MHS, the labor hierarchy, by resolution and speech, made clear their ambition and determination to secure for the nation complete hospital and medical care "at no expense to the recipients."

The news item states that $10,000 has been subscribed to formulate the new corporation. Evidently this is not to be an insurance company which would call for $200,000 capital. It must be planned therefore to incorporate under the enabling acts sponsored by the Michigan State Medical Society in 1939 (N.P.A. 108, 1939). That act contains this paragraph:

"*Section 8.* The board of directors of a non-profit medical care corporation shall have representatives of the public and the medical profession of the state: provided that a majority of the directors shall be at all times, persons approved by the officers of the medical profession duly organized to promote statewide the science and art of medicine."

(Continued on Page 364)

Wayne University College of Medicine

Postgraduate Continuation Courses

March 12-June 9, 1956

These courses are open to all qualified persons.

Veterans receiving benefits under the G.I. Bill should contact Dr. Arthur Johnson, Veterans Administrator at Wayne University, 666 Student Center Building. 5050 Cass.

Registration for these courses should be made in the office of Postgraduate Medical Education at the College of Medicine, 1401 Rivard.

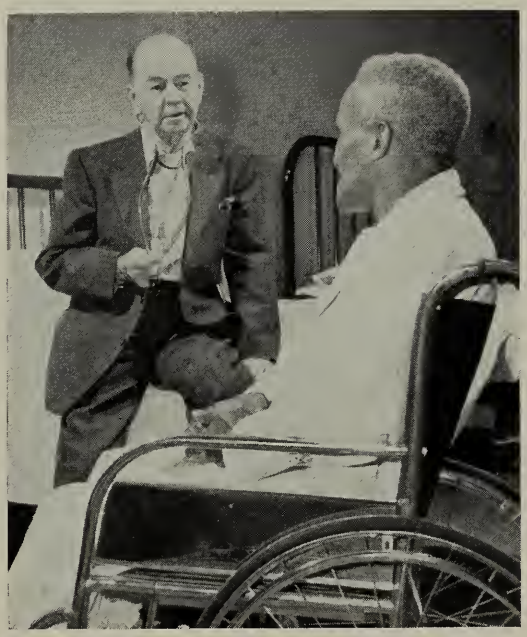
	ANATOMY		
Regional Anatomy			
Thorax, Abdomen & Pelvis	College of Medicine	Wed. 1-5	$50.00
Back and Extremities	College of Medicine	Thur. 1-5	$50.00
Head and Neck (Open to Dentists)	College of Medicine	Fri. 1-5	$50.00
	MICROBIOLOGY		
Parasitology and Medical Entomology	College of Medicine	Mon. Wed. 1-5	$50.00
Microbiology Seminar	College of Medicine	Thur. 3-4	$15.00
	PHYSIOLOGICAL CHEMISTRY		
Quantitative Methods and Metabolism	College of Medicine	Tu. Wed. Thur. Fri. 8-12	$50.00
Nutrition	College of Medicine	Mon. Wed. Fri. 11-12	$35.00
Survey of Medical Chemistry	College of Medicine	Thur. 4-5	$15.00
P. Chemistry Seminar	College of Medicine	Wed. 2:30-3:30	$15.00
	PHYSIOLOGY AND PHARMACOLOGY		
Physio. & Pharm. Seminar	College of Medicine	Tues. 4-5	$15.00
	PATHOLOGY		
Pathology of Neoplasms	College of Medicine	Wed. 1-5	$50.00
	DERMATOLOGY		
Seminar in Dermatology	Receiving Hospital	Wed. 10-12	$15.00
Dermopathology Seminar	Receiving Hospital	Wed. 1-2	$15.00
	INTERNAL MEDICINE		
Gastroenterology Clinic	Receiving Hospital 243 Farwell Annex	Sat. 8-9 a.m.	$15.00
Medical X-Ray Conference	Receiving Hospital 243 Farwell Annex	1st, 2nd, 3rd, 5th Tu. 11-12	$15.00
Medical Pathologic Conference	Receiving Hospital 243 Farwell Annex	Wed. 11-12	$15.00
	ONCOLOGY		
Cancer Detection	Yates Clinic	Wed. 3-5	$25.00
	PSYCHIATRY		
Psychoanalytic Psychiatry	Receiving Hospital 201 Farwell Annex	To be arranged	$15.00
Seminar in Psychiatry	Receiving Hospital 201 Farwell Annex	To be arranged	$15.00
	SURGERY		
Surgery Seminar	645 Mullett, 4th Fl.	Mon. 4-5	$15.00

Michigan's Foremost Family Physician

A *Tribute*

It is almost impossible to condense the many-faceted life of Walter H. Winchester into a profile. If it were necessary to sum up the man in just one line, I think it would have to be said that he is a man of many pursuits and does everything he undertakes with exceptional skill.

Some might want to look for the source of an inner drive or compulsion that he keeps this man so active and adept at eighty-one years of age. But I think he just gets a lot of fun out of living and doing things. He loves to hunt and fish for his own personal satisfaction and not for the glory of showing off his catch. He never parades his medical statistics before his colleagues, but is utterly content to see his patients get well and know the inner content of a job well done. In short, he is modest and humble.



Doctor Winchester interviewing a patient at the County Hospital which is under his direction. He has full responsibility for the medical care of the county patients there.

If I ever knew a doctor who could be called a "general specialist," it would be Dr. Winchester. And the remarkable thing to remember is that so much of today's modern practice has come about since he left medical school, which more or less makes him an Abe Lincoln who learned his lesson the well-known "hard way." From tonsils to fractures, from cholecystectomies to deliveries, from tracheotomies to pneumothorax—Walter has done almost everything that there is to do in medicine with meticulous skill.

To go with his technical ability, we find a warm personality and a generous approach to the troubles of people. He has dark, piercing eyes made kindly by a crinkle at the corners that goes with a look of perpetual interest and amusement. He is a man who would instinctively catch your interest and one you would immediately trust.

He must be a man of great self-discipline. Perhaps this is one of the most important ingredients of his many skills and accomplishments. He will force himself each fall to use the eleven flights of stairs at Hurley Hospital rather than the elevator so that he will be in condition for hunting. He is a great student of the classics. Now, maybe he hasn't had to force himself to study these, but if Walter made up his mind to do it, I'm sure he could discipline himself to read half the books in the Library of Congress.

To know Walter is to feel a new zest for life. He lives each day to the fullest and always looks forward to even better tomorrows. His own motto is, "Never look back, something might be catching up with you." We who know him well realize how truly his own life of activity and accomplishment exemplifies his adherence to this motto.

At a testimonial luncheon in his honor (Detroit, March 8, 1956), a scroll of appreciation was presented to Dr. Winchester by the Michigan State Medical Society. A quotation from this highly illuminated parchment epitomizes the life-work of Walter H. Winchester, M.D.: "For valued service rendered to the health of the people of Michigan in more than a half century of practice and for constant constructive effort to improve the profession."

—Jackson E. Livesay, M.D.

Jean Pearson

Science Writer, Pilot, Student, Housewife—Her Talents Are Many

The Detroit Free Press received the MSMS Award for Excellence in Medical Reporting at the 1956 Michigan Clinical Institute, with a supporting award going to Jean Pearson, Free Press reporter primarily responsible for science and medical news. Following is a personal sketch of Mrs. Pearson written especially for JMSMS by a fellow-member of the Free Press staff.



Aside from weather, babies and pets there are very few news stories more closely read than those relating to health.

People follow their aches and pains very carefully. They want to know the latest information concerning heart disease. They want to read about new treatments for hay fever. They like to follow the progress of cancer research, new developments in polio therapy. They are fascinated with any information that pertains to their livers and lights.

But newspaper coverage of medical events is very difficult. Technical terms must be translated into every day English in a fashion which will satisfy the doctors, and still result in a readable story.

Equally as pressing is the necessity a newspaper encounters daily of picking out events of real significance in the medical world, and avoiding entanglement with issues of doubtful importance.

Fortunately for the *Free Press* and its readers, the *Free Press* staff includes a writer with excellent background and inclination for the type of medical coverage the *Free Press* likes to provide.

Jean Pearson is a veteran newspaper woman with a wide range of scientific interests.

Among her assignments in the medical field are the coverage of major medical meetings in the state, so that *Free Press* subscribers will receive the latest developments of the field in language they can understand.

Jean has been a key figure in the setting up of the *Fress Press* medical forums, at which recognized leaders in various medical specialties have publicly discussed medical problems and solutions.

Jean also has handled many *Free Press* drives to enlist public support of medical programs—heart, polio, mental health, cancer, multiple sclerosis.

Jean has constantly sought to gain the confidence of the scientists. We believe that by now they feel that their work is being accurately presented, without too much gee whiz, or arousing of false hopes among people with serious medical problems.

Jean is a familiar figure by now wherever doctors gather—a tall, serene blond girl who can talk their language.

Jean attended the University of Michigan and obtained her bachelor's degree from Wayne University. She is constantly returning to school during her spare time, and is currently studying general and industrial psychology, of evenings, and semantics whenever time permits.

As a youngster at home Jean had her own microscope and spent a lot of time peering at bugs, plant lice and whatever else aroused her curiosity.

She took heavy doses of chemistry, physiology, zoology (frogs, grasshoppers), general science, psychology, along with other university subjects.

She raised white mice, chameleons, turtles, dogs and canaries, but no cats.

It is known that she once raised an alligator at

the family home, although to what size nobody is quite sure.

During summer vacation trips Jean visited the Atlantic sea coast with her family and splashed about on the tide flats looking for starfish and sea urchins for her collections.

Jean never was much of a girl for pouring tea at doll parties. She made model airplanes, owned a B-B gun and played football with the neighborhood lads, asking no quarter and giving none.

Flying always intrigued Our Girl Jean. She had her first ride, like thousands of other Americans, in a Ford tri-motor, and started flying in 1940.

Early in World War II, she enlisted in the WASP ferry command and underwent Army Air Force flight training in Texas.

She was assigned to the Second Ferrying Division at the conclusion of her training and wound up on temporary detached duty at Camp Davis, N. C.

Among her wartime tasks was serving with a tow target squadron, and teaching radar-tracking of 40 and 90 millimeter anti-aircraft guns.

Later in the war, Jean transferred to the Navy and was commissioned in 1944 after attending midshipmen's school at Smith College.

She finished out the war writing technical articles for the Deputy Chief of Naval Operations at the aviation training division in Washington, D. C.

Jean is still quite "shook up" by flying and Lieutenant Pearson Ma'am can be found at the gatherings of the naval reserve helicopter squadron at Grosse Ile, to which she is assigned.

Jean works out her vacation schedule so she can participate yearly in the cross-country Powder Puff Derby, an air race for women pilots. She has flown in the Derby three years, now.

Besides her writing, flying and studying, Jean also is a busy housewife.

She is married to Morton C. Pearson, an attorney and assistant to the Wayne County Friend of the Court. Mr. Pearson is a lieutenant colonel in the 70th Infantry Reserve Division.

It is Mort's theory that the only way to stop Jean from continuing her postgraduate studies is to burn down Wayne University.

It is the feeling of the *Free Press* that the progress of medicine can obtain increasing benefit from close co-operation with press and public and that Jean is just the girl to continue getting the messages across.

—Louis Cook

MATERNAL DEATHS

(Continued from Page 298)

fatigued primigravidae will deliver spontaneously. Only rarely do we have any difficulty in persuading either private or indigent patients to accept pudendal nerve block or local anesthesia for delivery of their infants.

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1401 Rivard St., Detroit 7

Michigan State Medical Society

Annual Session of the Council

Detroit, January 26-27, 1956

HIGHLIGHTS

- The Auditors' report for the year 1955 and the budgets for 1956 were approved (see pages 332-336).
- Annual reports of the Secretary and Editor were presented and approved.
- Reports of the three standing committees of The Council (County Societies, Finance, Publication), meetings of January 25, 1956, were accepted.
- Secretary L. Fernald Foster, M.D., Bay City; Treasurer Wm. A. Hyland, M.D., Grand Rapids; Editor Wilfrid Haughey, M.D., Battle Creek, were re-elected for 1956.



THE MSMS COUNCIL—1956

Top row: H. H. Hiscock, M.D., Flint; William Bromme, M.D., Detroit; G. T. McKean, M.D., T. P. Wickliffe, M.D., Calumet; K. H. Johnson, M.D., Lansing; L. C. Harvie, M.D., Saginaw, and B. T. Montgomery, M.D., Sault Ste. Marie.

Middle row: B. M. Harris, M.D., Ypsilanti; A. E. Schiller, M.D., Detroit; R. H. Baker, M.D., Pontiac; G. W. Slagle, M.D., Battle Creek; O. B. McGillicuddy, M.D., Lansing; W. S. Stinson, M.D., Bay City, and Wilfrid Haughey, M.D., Battle Creek.

Front row: G. B. Saltonstall, M.D., Charlevoix, Chairman of Publication Committee; Arch Walls, M.D., Detroit, President-Elect; W. S. Jones, M.D., Menominee, President; D. Bruce Wiley, M.D., Utica, Chairman of The Council; W. B. Harm, M.D., Detroit, Vice Chairman of The Council; Ralph W. Shook, M.D., Kalamazoo, Chairman of Finance Committee; L. Fernald Foster, M.D., Bay City, Secretary.

Absent: W. A. Hyland, M.D., Grand Rapids; W. M. LeFevre, M.D., Muskegon; J. D. Miller, M.D., Grand Rapids, and H. B. Zemmer, M.D., Lapeer.

- Progress report on Michigan Medical Service was presented by Wilfrid Haughey, M.D., President of Michigan Blue Shield; progress report on Michigan Hospital Service was given by Wm. S. McNary, Executive Vice President of Michigan Blue Cross.
- Annual reports of individual Councilors on the condition of the profession in their Districts were presented.
- Monthly reports of Council Chairman D. Bruce Wiley, M.D., Utica; President W. S. Jones, M.D., Menominee; Secretary L. Fernald Foster, M.D., Bay City;

Rheumatic Fever Coordinator Leon DeVel, M.D., Grand Rapids, were presented and accepted.

- Michigan Health Commissioner A. E. Heustis, M.D., Lansing, presented mutual problems to the Councilors for their information and advice.
- Committee reports were presented by: (a) Ethics Committee, meeting of December 2; (b) Scientific Radio Committee, December 15; (c) Committee on Study of Fee Schedules, Michigan Medical Service, December 18 and January 14-15; (d) Legislative Committee, December 21; (e) Joint Committee with State Bar of Michigan, December 21 and January 19; (f) Preventive Medicine Committee, January 5; (g) Postgraduate Medical Education Committee, January 12; (h) Committee on Arrangements for Residents-Interns-Senior Medical Students Conference. January 12; (i) Rural Medical Service Committee, January 18; (j) Committee on Closed Panel Practice, January 25; and (k) Industrial Health Committee, January 22.
- Program for the MSMS County Secretaries-Public Relations Seminar of January 27-28-29, to be held in Detroit, was presented and approved.
- Committee on Memento for R. L. Novy, M.D., Detroit, longtime President of Michigan Medical Service, made its recommendations which were approved by The Council.
- Appointments. (a) At the request of the Governor, The Council nominated the following for the Governor's Commission to Study Prepaid Hospital Care Plans —one MSMS representative to be selected: K. H. Johnson, M.D., Lansing; W. S. Jones, M.D., Menominee; A. E. Schiller, M.D., Detroit; O. D. Stryker, M.D., St. Clair Shores; and E. C. Swanson, M.D., Vassar. (b) Max L. Lichter, M.D., Detroit, as member of Committee on Closed Panel Practice, MSMS.
- Matters referred to The Council by the 1955 House of Delegates: Reports were made on a question of screening foreign graduates; (b) pollution of inland waterways; (c) and optometric legislation. These reports were referred to the 1956 MSMS House of Delegates.
- MSMS representatives: (a) R. L. Novy, M.D., Detroit, to Symposium on Medical Schools and Their Relationship to Private Practice (AMA sponsored), Chicago, February 13; (b) Wilfrid Haughey, M.D., Battle Creek, to Professional Relations Conference of Blue Shield, Chicago, February 16-18; (c) Executive Director Wm. J. Burns as Chairman of Organization Board for Michigan Week, May 20-27 was authorized.
- Proposal of State Board of Pharmacy to increase state narcotic license fee from $1 to $2: The Council feels there should be no increase unless it can be proven it is warranted.
- Southeastern Michigan Tuberculosis x-ray screening survey project. This project which did not receive the approval of the Executive Committee of The Council on December 14, was reconsidered. After lengthy discussion, The Council sustained the action of the Executive Committee, but heartily endorsed the project —provided it follows the previous screening processes and does not include follow-up 14" x 17" films.
- The Council congratulated the MSMS Executive Office on its development of two new brochures: (a) "Progress"; and (b) "So You've Been Elected," the organizational handbook for component society officers. Both of these brochures will be presented at the County Secretaries-Public Relations Seminar of January 27-29.
- The Council recommended to the 1956 House of Delegates that the Constitution be amended in Article X, Section 3, to give the Vice-Speaker of the House of Delegates a vote in The Council and in the Executive Committee of The Council.
- The Council approved the Secretary's recommendation that the one per cent (1%) dues collection expense be allowed to component societies only if deducted prior to remitting dues, to obviate much unnecessary bookkeeping.
- The Council authorized the study of use of electronic devices (such as IBM) to modernize the MSMS membership system.

MEMBERSHIP RECORD—1955

COUNTY MEDICAL SOCIETY	PAID 1954	PAID 1955	SPECIAL MEMBERS LIFE	SPECIAL MEMBERS RET'D	SPECIAL MEMBERS ASSOC	SPECIAL MEMBERS MIL	DEATHS 1954	DEATHS 1955	NET MEMBERSHIP 1954	NET MEMBERSHIP 1955	1955 GAIN	1955 LOSS	UNPAID 1954	UNPAID 1955
Allegan	22	24	—	—	—	—	—	3	23	21	—	2	—	—
Alpena, Alcona, Presque Isle	23	24	2	—	1	—	—	—	27	27	—	—	—	—
Barry	11	16	2	—	—	—	1	—	14	17	3	—	—	—
Bay, Arenac, Iosco	73	72	5	3	2	2	—	—	83	82	—	1	—	—
Berrien	77	82	1	—	1	1	2	—	86	82	—	4	—	2
Branch	25	24	3	—	—	—	—	—	27	27	—	—	—	1
Calhoun	103	100	12	2	24	2	1	—	118	137	19	—	—	—
Cass	10	9	2	—	—	1	—	—	11	11	—	—	—	—
Chippewa-Mackinac	23	23	3	1	—	—	—	—	27	27	—	—	—	—
Clinton	15	15	1	—	—	—	—	—	16	16	—	—	—	—
Delta-Schoolcraft	22	20	2	1	1	2	—	—	22	24	2	—	—	1
Dickinson-Iron	17	18	1	1	—	—	—	—	18	20	2	—	1	—
Eaton	19	19	—	—	4	—	—	—	21	23	2	—	—	—
Genesee	205	213	20	—	97	4	5	5	229	325	96	—	—	1
Gogebic	18	20	1	—	—	—	—	—	19	21	2	—	—	1
Grand Traverse, Leelanau, Benzie	40	47	1	3	3	—	1	—	46	53	7	—	1	—
Gratiot-Isabella, Clare	37	41	2	—	—	—	1	—	43	42	—	1	—	1
Hillsdale	13	14	5	—	1	—	—	—	19	20	1	—	—	—
Houghton, Baraga, Keweenaw	25	24	7	—	—	1	—	—	31	31	—	—	—	—
Huron	14	14	1	—	—	—	—	—	15	15	—	—	1	—
Ingham	190	194	6	8	34	3	2	2	209	240	31	—	—	—
Ionia-Montcalm	40	36	5	—	1	—	—	—	46	42	—	4	—	—
Jackson	100	100	15	—	5	1	3	3	118	117	—	1	—	—
Kalamazoo	142	141	8	3	5	2	—	—	155	157	2	—	—	—
Kent	323	329	20	1	32	6	3	3	368	379	11	—	1	5
Lapeer	15	15	4	—	1	—	—	—	19	20	1	—	1	—
Lenawee	40	40	2	1	1	1	1	1	43	43	—	—	2	1
Livingston	21	21	—	—	—	—	1	—	21	20	—	1	1	—
Luce	8	11	1	—	—	—	—	—	9	12	3	—	—	—
Macomb	60	69	1	—	—	2	—	—	60	70	10	—	1	—
Manistee	11	10	1	—	—	1	1	1	11	10	—	1	—	1
Marquette-Alger	35	36	4	2	2	—	—	—	42	44	2	—	—	—
Mason	11	12	—	—	1	—	—	—	12	13	1	—	—	—
Mecosta, Osceola, Lake	15	15	2	—	—	—	—	—	17	17	—	—	—	—
Menominee	17	15	1	—	—	—	—	—	17	16	—	1	—	—
Midland	29	28	1	—	—	—	—	—	29	29	—	—	—	—
Monroe	35	36	1	—	—	2	1	1	35	36	1	—	—	—
Muskegon	94	100	4	2	2	3	1	1	98	107	9	—	1	—
Newaygo	9	8	—	—	—	—	—	—	9	8	—	1	1	1
North Central	24	23	1	1	2	—	1	—	26	26	—	—	—	—
Northern Michigan	33	35	2	—	1	1	1	1	36	37	1	—	—	—
Oakland	254	278	16	1	7	1	2	2	276	300	24	—	4	3
Oceana	7	8	2	—	1	—	1	1	11	10	—	1	—	—
Ontonagon	4	4	1	—	—	—	—	—	5	5	—	—	—	—
Ottawa	50	51	2	—	2	—	—	—	54	55	1	—	—	—
Saginaw	124	130	8	6	4	2	—	—	140	148	8	—	—	—
St. Clair	60	63	1	4	7	2	1	—	70	74	4	—	—	—
St. Joseph	26	23	2	1	—	1	—	—	27	26	—	1	—	—
Sanilac	13	13	—	—	1	—	—	—	13	14	1	—	—	—
Shiawassee	26	27	—	—	2	1	1	1	27	28	1	—	1	1
Tuscola	18	15	2	—	—	2	—	—	18	17	—	1	—	1
Van Buren	22	21	2	—	—	1	—	—	23	23	—	—	—	2
Washtenaw	226	220	10	2	104	5	4	4	321	332	11	—	6	2
Wayne	2351	2416	98	19	81	33	25	25	2504	2589	85	—	11	23
Wexford-Missaukee	14	16	2	—	—	—	—	1	16	17	1	—	—	—
Honorary	—	—	—	—	—	—	—	—	7	7	—	—	—	—
TOTAL:	5239	5378	296	62	430	83	64	64	5787	6109	342	20	33	47

SECRETARY'S ANNUAL REPORT

TO: The Council of the Michigan State Medical Society.

I herewith submit the report of the Secretary for the year 1955.

MEMBERSHIP

The Michigan State Medical Society membership for 1955 showed a total of 6109 members, including 62 retired, 296 Life & Emeritus and 430 Associate-Military and 7 Honorary members. The total paid membership was 5378 with net dues of $131,526.25. The 1955 membership was once again at the highest peak in the history of the Society. The number of members with unpaid dues for 1955 was 47.

DEATHS DURING 1955

I regretfully must report a total of sixty-four deaths among members during the past year.

Allegan County—Eugene T. Brunson, M.D., Ganges; Clifford C. Corkill, M.D., Douglas; Charles C. Flinn, M. D., Allegan.

Barry County—Guy C. Keller, M.D., Hastings.

Berrien County—Henry J. Burrell, M.D., Benton Harbor.

Calhoun County—Lawrence N. McNair, M.D., Albion.

Genesee County—Glenn R. Backus, M.D., Flint; Henry R. Biggar, M.D., Flint; Arthur McArthur, M.D., Flint; Blythe R. Sleeman, M.D., Linden; George W. Trumble, M.D., Flint.

Gratiot-Isabella-Clare—William E. Barstow, M.D., St. Louis.

Grand Traverse-Leelanau-Benzie County—Henry Duiker, M.D., Traverse City.

Ingham County—E. R. Vander Slice, M.D., Lansing; Harry A. Wilson, M.D., Lansing.

Jackson County—Warren B. Anderson, M.D., Jackson; William H. Enders, M.D., Jackson; James J. O'Meara, M.D., Jackson.

Kent County—Eugene S. Browning, M.D., Grand Rapids; Peter J. Kriekard, M.D., Grand Rapids; Paul W. Willits, M.D., Grand Rapids.

Lenawee County—Thomas H. Blair, M.D., Adrian.
Livingston County—Harry G. Huntington, M.D., Howell.
Manistee County—Gordon D. Ogilvie, M.D., Manistee.
Monroe County—Herbert W. Landon, M.D., Monroe.
Muskegon County—Robert A. Risk, M.D., Muskegon.
Northern Michigan—George H. Wood, M.D., Onaway.
North Central Counties—Claude R. Keyport, M.D., Grayling.
Oakland County—Charles B. Tolle, M.D., Pontiac; Waldron W. Wellman, M.D., Holly.
Oceana County—John H. Nicholson, M.D., Hart.
Shiawassee County—Arthur M. Hume, M.D., Owosso.
St. Clair County—Clayton C. Benjamin, M.D., Port Huron.
Washtenaw County—Hugh M. Beebe, M.D., Ann Arbor; Carl Dudley Camp, M.D., Ann Arbor; Reynold L. Haas, M.D., Ann Arbor; Dean W. Myers, M.D., Ann Arbor.
Wexford County—Clifton E. Merritt, M.D., Manton.
Wayne County—Axel U. Axelson, M.D., Detroit; Neil I. Bentley, M.D., Detroit; Ralph H. Bookmyer, M.D., Detroit; William Paul Buchanan, M.D., Detroit; Arthur N. Chatel, M.D., Detroit; A. James DeNike, M.D., Detroit; Kater Donelson, M.D., Inkster; Walter D. Ford, M.D., Detroit; John M. Graff, M.D., Detroit; Robert S. Hewitt, M.D., Lincoln Park; Alfred W. Holmes, M.D., Detroit; William H. Honor, M.D., Wyandotte; Frederick W. Hyde, Sr., M.D., Detroit; William E. Keane, M.D., Grosse Pointe; Koert Koster, M.D., Detroit; Leonard W. Lang, M.D., Detroit; David Littlejohn, M.D., Eloise, Michigan; Henry A. Luce, M.D., Detroit; Edgar H. Norris, M.D., Detroit; Walter R. Parker, M.D., Detroit; Herman R. Rothman, M.D., Detroit; Charles F. Ryan, M.D., Detroit; Frank L. Ryerson, M.D., Detroit; DeWitt L. Sherwood, M.D., Detroit; Harry C. Wissman, M.D., Dearborn.

THE JOURNAL

The following financial information relative to THE JOURNAL is found in the annual audit report of MaDan & Bailey.

Income was $84,352.18 which is $12,952.18 over the tentative budget for 1955. Expenses were $83,311.13 which was $12,140.16 over the 1955 tentative budget, however this figure indicates a net gain for the year 1955 of $1,041.05.

In the total income of $84,352.18, only $7,876.46 was received from the allocation of dues.

THE JOURNAL has appeared during 1955 with new art work on the covers. This has been done by Mr. Dirk Gringhuis who was engaged to design the covers depicting various activities of the MSMS.

At the November SJAB Conference in Chicago, a prominent format expert rated the thirty-three State Medical Journals in the Bureau and the THE JOURNAL, MSMS received one of the highest ratings.

FINANCES

An audit of the books of the Society was completed by MaDan and Bailey as of December 24, 1955. This has been submitted to the Finance Committee for study and is available to any member of the society for perusal at the Executive office, 606 Townsend St., Lansing, Michigan.

A brief summary of the audit produces the following information:

Assets:	
Cash	$ 55,047.37
Accounts Receivable	8,998.34
Investments	146,930.52
Property	53,289.78
Other Assets	10,551.41
Total Assets	$274,817.42
Liabilities:	
Accounts Payable	6,572.80
Deferred Income	3,310.00
Total Liabilities	$ 9,882.80
Society Equities	
Reserved for Special Purposes	
Public Education Reserve	$ 30,000.00
Public Education Program	76,494.02
Public Service Account	281.28
Professional Relations Account	6,805.30
Rheumatic Fever Control Program	22,704.24
Contingent Fund	37,267.34
Building Fund	13,788.46
General Society Equity	73,452.24
Net Gain for Period	4,141.74
Total Liabilities and Equities	$274,817.42

We note from the Income and Expense Summary of December 24, 1954 to December 24, 1955, that the total balance, other than the Beaumont portion, was $234,-470.54. Income for the period was $385,669.57. Expenses for the period were $364,995.78, net gain is $20,673.79 with a balance on hand of $255,144.33.

The balance advanced to the Beaumont Memorial is $9,790.29.

Increases in expenditures have been for General Society activities. The allocations of dues to the Public Relations Department have remained at $15.00 which was a decrease that has been in effect one year.

The 1955 House of Delegates authorized a $10.00 assessment for the General Funds and P. E. Reserve in order that they might be maintained at a level consistent with the general activities of the society.

1955 ANNUAL SESSION

We are happy to announce that once again the 1955 Annual Session broke all previous attendance records (for Grand Rapids) with a total of 3,585. The breakdown on the registration follows: Doctors of Medicine 1671, Guests 559, Exhibitors 597, Woman's Auxiliary members 366, and Medical Assistants Society members 392.

The General Assembly type of program with discussion conference was continued as in previous years and the 124 Technical and 13 Scientific Exhibits received the usual generous attention of the registrants.

1955 HOUSE OF DELEGATES

The 90th Annual Session of the Michigan State Medical Society's House of Delegates was held in Grand Rapids, September 26-27, 1955.

The House of Delegates:

1. Adopted with thanks the President's Address, the President-Elect's Address, the report of Delegates to the American Medical Association, the Annual Report of the President, Woman's Auxiliary to the Michigan State Medical Society, and the Annual Report of the President, Michigan State Medical Assistants Society.
2. The Annual Reports of The Council (including the Annual Reports of Committees of The Council) were adopted as amended (re assessment for 1956).
3. Adopted Annual Reports of all Standing Committees and of all Special Committees of the Society.
4. *Elected Walter H. Winchester, M.D., Flint,* as Michigan's Foremost Family Physician for 1955.
5. Adopted resolutions concerning: (a) appreciation of public service rendered by R. L. Novy, M.D., Detroit; (b) Beaumont Memorial preservation; (c) screening of foreign interns; (d) Jenkins-Keogh Bill; (e) "Medic" —commendation to the Los Angeles County Medical Society; (f) medical representation on Voice of America; (g) fee for examination of mentally ill; (h) possible optometric legislation; (i) creation of Occupational Health Section; (j) driver training; (k) AMA Study Committee on Highway Accidents; (l) appreciation of service rendered by L. A. Drolett, M.D., Lansing; (m)

speedy recovery for President Eisenhower; (n) Committee on Division of Fees (MMS); (o) California Cancer Commission; (p) periodic health examinations by hospital staffs; (q) hospital privileges (approved as amended); (r) hospital facilities for the mentally ill (approved as amended); (s) study of surgical fees—Blue Shield (approved as amended); (t) contributions to Beaumont Memorial (approved as amended).

Adopted substitute resolutions concerning: (a) propaganda on Salk vaccine; (b) pollution of inland waterways; (c) Blue Shield reporting in mediation cases; (d) expansion of AMA administrative facilities; (e) nonscientific sessions at AMA Conventions.

Referred: (a) to introducer, for clarification, a resolution re Joint Commission on Accreditation of Hospitals; (b) to MSMS Mental Health Committee for study a resolution re increasing hospital personnel for the mentally ill.

6. Disapproved resolutions concerning: (a) county society membership; (b) fluoridation of water; (c) old age and survivors insurance program—but recommended that county medical societies conduct polls of their memberships on this question; (d) election of Executive Committee of The Council.

7. Elected to Special Memberships:

(a) *Thirty-five members to Life Membership:* (Bay) Aloysius J. Zaremba, M.D., Bay City; (Branch) Kendall B. Rees, M.D., Coldwater; (Dickinson-Iron) George H. Boyce, M.D., Iron Mountain; (Genesee) Clifford P. Clark, M.D., Coral Gables, Florida, Lafon Jones, M.D., Flint, and Edwin E. Miller, M.D., Flint; (Ionia-Montcalm) Robert H. Haskell, M.D., Northville, Lee E. Kelsey, M.D., Lakeview, and Isaac S. Lilly, M.D., Stanton; (Jackson) Edward W. Douglas, M.D., Jackson, Walter L. Finton, M.D., Jackson, and Frank F. Pray, M.D., Jackson; (Kalamazoo) Dirk J. Scholten, M.D., Kalamazoo; (Menominee) Henry T. Sethney, M.D., Menominee; (Midland) Joseph H. Sherk, M.D., Midland; (St. Joseph) Charles G. Miller, M.D., Sturgis; (Washtenaw) Howard H. Cummings, M.D., Ann Arbor, Warren E. Forsythe, M.D., Ann Arbor, Christopher G. Parnall, M.D., Ann Arbor, and Inez R. Wisdom, M.D., Ann Arbor; (Wayne) Alexander W. Blain, M.D., Frederick H. Cole, M.D., William A. Defnet, M.D., Martin S. Dubpernell, M.D., Samuel Glassman, M.D., Fred L. Honhart, M.D., Charles J. Jentgen, M.D., E. V. Joinville, M.D., George M. Laning, M.D., Elbert A. Martin, M.D., William O. Merrill, M.D., Plinn F. Morse, M.D., Fred W. Organ, M.D., John B. Rieger, M.D., and Susanne M. Sanderson, M.D., all of Detroit.

(b) *Seven members to Retired Membership:* (Bay) Edward S. Huckins, M.D., Bay City; (Calhoun) Theodore Kolvoord, M.D., Battle Creek; (Delta-Schoolcraft) John J. Walch, M.D., Escanaba; (Wayne) John R. Boland, M.D., Jerome W. Ankley, M.D., Ray D. Schirack, M.D., Bertrand C. Switzer, M.D., all of Detroit.

(c) *Seventeen members to Associate Membership:* (Delta-Schoolcraft) Gilbert W. Benson, M.D., Escanaba; (Eaton) Richard K. Meinke, M.D., Rochester, Minnesota; (Muskegon) Robert G. Heneveld, M.D., (Wayne) Henry A. Archambault, M.D., Detroit, Dorothy Fisher Caton, M.D., Detroit, Charles M. Ebner, M.D., Detroit, Martin Z. Feldstein, M.D., Detroit, Dunbar P. Gibson, M.D., Detroit, Gene L. Hackleman, M.D., Dearborn, Ralph G. Hubbard, M.D., Detroit, Werner K. Kersten, M.D., Detroit, Francine Larson, M.D., Wyandotte, Nur M. Malik, M.D., India; Charles W. Park, M.D., Detroit, Eugene V. Perrin, M.D., Washington, D.C., Jack C. Smith, M.D., Detroit, and Vincent J. Turcotte, M.D., Detroit.

8. Elected the following officers:

(a) A. E. Schiller, M.D., Detroit, as Councilor of the 1st District (1960).

(b) O. B. McGillicuddy, M.D., Lansing, as Councilor of the 2nd District (1960).

(c) G. W. Slagle, M.D., Battle Creek, as Councilor of the 3rd District (1960).

(d) D. Bruce Wiley, M.D., Utica, as Councilor of the 15th District (1960).

(e) G. Thomas McKean, M.D., Detroit, as Councilor of the 16th District (1960).

(f) J. S. DeTar, M.D., Milan (1957); W. A. Hyland, M.D., Grand Rapids (1957); and C. I. Owen, M.D., Detroit (1957), as Delegates to the American Medical Association.

(g) W. W. Babcock, M.D., Detroit (1957); E. F. Sladek, M.D., Traverse City (1957); O. J. Johnson, M.D., Bay City (1957); and Wm. Bromme, M.D., Detroit (1956), as Alternate Delegates to the American Medical Association.

(h) Arch Walls, M.D., Detroit, as President-Elect.

(i) J. E. Livesay, M.D., Flint, as Speaker, House of Delegates.

(j) K. H. Johnson, M.D., Lansing, as Vice Speaker, House of Delegates.

ORGANIZATIONAL ACTIVITIES

MICHIGAN CLINICAL INSTITUTE

The Ninth Michigan Clinical Institute was held in Detroit, March 9-10-11, with another record shattering registration of 2,980. For the second year Smith, Kline & French Laboratories presented color television for the instruction and information of these attending. At a special testimonial banquet seven Michigan doctors of Medicine who are presidents of National Organizations were honored.

ANNUAL SECRETARIES—PUBLIC RELATIONS CONFERENCE

The Annual County Secretaries-Public Relations Conference was held in Detroit, January 30.

OTHER ORGANIZATIONAL ACTIVITIES

1. The third annual meeting of Michigan's County Medical Society Executive Secretaries (seven) was held in Lansing, February 15, with a program that stimulated greater organizational effort and understanding in mutual problems.

2. The Residents, Interns and Senior Medical Students Conference again was held in Detroit on March 9, coincident with the Michigan Clinical Institute with 138 attending. Since the future of medicine lies in the hands of these young men and women whose zeal—obvious at the March meeting—forecasts a good tomorrow for the medical profession and the people of this State, The Council plans a similar conference coincident with the 1956 Michigan Clinical Institute.

MSMS again sponsored financially the sending of delegates from Michigan's two medical schools to the Student AMA Convention in Chicago in May, 1955.

3. National medical leaders from Michigan continue to increase in numbers: during the 1955 Michigan Clinical Institute, seven Michigan doctors of medicine were honored for achieving, during this year, the presidency of national medical associations: A. C. Curtis, M.D., Ann Arbor; L. A. Ferguson, M.D., Grand Rapids; W. A. Hudson, M.D., Detroit; A. C. Kerlikowske, M.D., Ann

Arbor; H. M. Pollard, M.D., Ann Arbor; A. D. Ruedemann, M.D., Detroit, and C. C. Sturgis, M.D., Ann Arbor.

4. Indoctrination of new MSMS members. This project, recommended by the Secretary in his Annual Report to The Council, 1954, was referred to the individual Councilors to organize in their respective Districts, with the co-operation of their county medical societies.

5. The Past Presidents' Club was organized during the past year and held its initial meeting in Detroit on March 10. Twelve past executives were present to formulate plans and projects whereby the storehouse of experience and knowledge of this group can be utilized, for the benefit of the entire medical profession and the people of Michigan.

6. For the Beaumont Memorial additional monies are needed to reimburse the Michigan State Medical Society to the extent of $9,790.29, the sum which the Society loaned to complete the Memorial. Less than 50 per cent of MSMS members have contributed to the building of the Memorial, an architectural and historical gem that belongs to all members of the medical profession and should be the financial responsibility of each and every practitioner of medicine in this state.

7. Organization among the fifty-five component county medical societies, covering all of Michigan's eighty-three counties, was maintained during the past year to a satisfactory degree. The scientific side of medicine in Michigan is at an all-time high. It is gratifying to note the many county and district society "Clinic Days" and the great increase in contributions to the medical literature by our members. Your secretary and various officers of the society paid official visits to most of the 55 county societies during 1955.

The Woman's Auxiliary and *Medical Assistant's Society* have continued many progressive projects during 1955. The latter has been active in stimulating the formation of a National Organization and were represented at the initial meeting in Kansas City.

Contacts with Governmental and Voluntary Agencies have been actively maintained during the past year. These contacts were reported in detail in the annual report of The Council.

PUBLIC RELATIONS

"Winning Friends for Medicine" continued to be the PR guidebook for Michigan Medicine in 1955. Carrying on the integration of county medical society PR programs with that of the MSMS, this publication became the workbook around which 29 meetings were held in as many areas of the State. A special effort succeeded in covering the Upper Peninsula with a series of meetings, the state delegation consisting of President R. H. Baker, M.D., President-Elect, William S. Jones, M.D., Secretary, L. Fernald Foster, M.D., Councilors T. P. Wickliffe, M.D., and B. T. Montgomery, M.D., and PR Counsel H. W. Brenneman. The other meetings were uniformly attended by key county medical society officers and by MSMS Officers and Councilors, PR Committee Chairman, C. Allen Payne, M.D., and public relations field secretaries.

Compiling figures on the communications media used during the past year reveals that articles written about M.D.'s, MSMS, and the views of the medical profession in Michigan newspapers would fill a newspaper column two miles long. The general tenor of the articles and the facts used are often the result of painstaking work by MSMS Officers and staff members. Motion pictures filmed and furnished by MSMS had a total running time of 151 hours before live audiences and television viewers in groups ranging from 15 to 150,000. MSMS supplied 44¾ hours of television programming and 435 hours of radio time. MSMS distributed a total of 96,484 pamphlets on timely matters of health import.

Work went forward on the production of the new MSMS sound and color 16 mm film "Something Called Epilepsy" and only a small fraction of the picture remains to be filmed and edited. Progress has been made on the Periodic Health Appraisal film script.

Your Officers and PR representatives have attended State and national conferences. These permitted adequate opportunity to discuss medicine's accomplishments and policies with leaders in various public interest fields, i.e., Rural Health, Adult Education, Medical and Professional PR, etc., at the same time affording comparison of projects with other state and county organizations. It is significant that Michigan is still cited as a leader in the field of medical public relations, one evidence being receipt this year of the ATAE Grand Award for State and Local Associations based on the medical associates recruitment program.

A great loss to our staff and our program was caused by the death of our veteran PR Field Secretary, Stuart A. Campbell. His knowledge and contacts developed over the years were extremely valuable. His loss has already been felt. After a thorough search Mr. Richard N. Philleo of Lansing was selected to fill the vacancy left by Mr. Campbell.

Awards granted this year to newspapers, radio and TV stations, and to individuals who have made outstanding contributions to health is evidence of the increasing assistance the medical profession is receiving in its announced intention of supplying adequate medical service and health education to a maximum number of people.

It seems unnecessary and repetitious to review in detail the specific PR program carried out by MSMS in 1955 because of the many publications which have carried that story and which themselves are indicative of strenuous activity intelligently applied. I would, however, invite your attention to the often overlooked fact that the PR program is not a thing set apart from other Society work, but rather, is inseparably part of every program of any nature which we have undertaken. This is particularly apparent in the new guidebook for members, "Progress . . . because Doctors Work Together" which has just been completed.

Last year this report referred to the growing trends of certain forces outside of medicine to make inroads upon the freedoms traditionally accorded professional people. In respect to medicine these trends have unfortunately increased during the past year. They now constitute four basic threats to the welfare of our profession and the people we serve. These threats are found in the corporate practice of medicine, socialized medicine, and the extension of undue influence in medical practice by business, labor and lay-controlled health interests. It therefore must be concluded that 1956 will demand increasing attention to these matters of prime public relations interest.

LEGISLATION

The Congress and the Michigan Legislature have but lately convened since our review of legislation reported in the Mid-Summer Meeting of The Council so I need not elaborate upon the legislative activities of 1955.

From these legislative bodies, however, have come definite indications that 1956 will bring greater attention to health problems. Already legislative proposals have been prepared respecting the Medical Practice Act, hospitals, mental health, chronic illness, disability insurance, consolidations of health agencies, supply of doctors, the financing of medical services, sickness as related to Workman's Compensation, etc. We need have no illusions that substandard healing groups will make their perennial attempts to gain access to the privilege of practicing medicine. We are informed that bills have been prepared requesting government licensure of vocations on the periphery of medicine for introduction into the State Legislature.

In the National Congress, legislation, particularly in the field of Social Security and Disability, holds our interest.

In addition we would be derelict in our duty as doctors and as citizens if we failed to recognize the importance of the elections of 1956 and the issues at stake. We have had other "years of decision" but for determination of long-range policies no previous year has offered more opportunity for good or evil than 1956 promises. I repeat our often expressed conviction that a realistic and personal interest in legislation and the legislative processes must be a primary part of MSMS plans.

COMMITTEES

Time and space do not permit the listing in detail of the many activities of all the committees contributing to the many splendid programs of the State Society. The accomplishments of the committees of the Society were achieved at the expense of many hours of personal sacrifice on the part of the personnel of the various committees. During 1955, *sixty-one* committees of the Michigan State Medical Society held a total of *seventy-seven* meetings and practically every meeting was attended by your Executive Director or Secretary. A total of *500* fellow members of your State Medical Society gave freely of their time to attend these meetings and assist in the operational activities of the State Society. Too much commendation cannot be accorded the committee members who contributed their time and effort to develop and execute constructive programs—both scientific and economic—for the public welfare and to maintain the position of leadership enjoyed by the Michigan State Medical Society in the field of progressive medical planning.

A committee representing all Councilor Districts was appointed during the year and has been actively at work studying the matter of Blue Shield Fee Schedules. This committee will make its report at a later date.

Active contacts are being made with governmental authorities in the matter of maintaining the Home Town Medical care plan for veterans.

SECRETARY'S LETTERS

As a part of the Society's general educational and informational program for individual members and for component County Societies there were issued during the year 1955, nine Secretary's Letters—(four to all members and five to county secretaries and keymen. These informational circulars were in addition to the monthly issues of THE JOURNAL with its scientific articles and informative news items. In addition, six Legislative Bulletins were issued to keymen during the 1955 Legislative Session to keep the membership informed of activities in the State Legislature pertaining to the practice of medicine.

THE EXECUTIVE OFFICE

Continued improvements have been made from time to time to the Executive Office. Increased parking facilities are now in the process of being provided by enlarging the paved parking area.

During the year, the Society lost a valued employe in the death of Stuart A. Campbell, Field Secretary. He was subsequently replaced by Mr. Richard Philleo of Lansing, Michigan.

Much valuable time of The Council and Executive Committee could be conserved if the constantly arising replacements and minor maintenance projects at the Executive office could be authorized at the time of need by the Secretary.

Again your attention is drawn to the antiquated and cumbersome membership record system at the Executive Office and a recommendation on this is included in this report.

The stenographic pool is operating short handed and should be increased by at least one more stenographer.

The Executive Office personnel has at all times discharged its duties with commendable loyalty and efficiency.

THE COUNCIL

Two new councilors were elected at the 1955 House of Delegates. Oliver McGillicuddy, M.D., succeeded Robert S. Breakey, M.D., in the 2nd District, and Arthur E. Schiller, M.D., succeeded Arch Walls, M.D., in the 1st District. Early in 1955, Dr. Thomas McKean was appointed to serve the unexpired term of Wyman D. Barrett, M.D., of the 16th District. In November, 1955, Walter S. Stinson, M.D., Bay City, was appointed to serve the unexpired term of Fred Drummond, M.D., of the 10th District.

After a careful consideration of the continued successful operation of the MSMS and its many projects, I respectfully submit the following recommendations: That—

1. The Vice Speaker of the House be made a member of The Council and its Executive Committee.
2. The Executive Office maintenance details be delegated to the Secretary.
3. The 1 per cent collection expense be allowed to County Medical Societies only if deducted prior to remitting dues.
4. That if the present study of membership records warrants, an IBM system (consistent with AMA method) be adopted—at least for operation by January 1, 1957.
5. Authority be given to employ another full-time stenographer for the stenographic pool.

Your Secretary wishes to express to the members of this Council his sincere appreciation for the helpful co-operation they have accorded him during the past year.

Too much commendation cannot be accorded the members of the Executive office staff for their loyalty, splendid co-operation and efficiency.

Your Secretary is especially appreciative of the constructive advice and services of Mr. Wm. J. Burns, Executive Director, Mr. J. Joseph Herbert, Legal Counsel, Wilfrid Haughey, M.D., Editor, and Mr. Robert Roney, Assistant Executive Director. We are especially grateful to Mr. Hugh Brenneman and his staff of exceptionally fine Field Secretaries who have done an unusual job, especially in legislative activities.

To everyone who has aided so generously and willingly in the discharge of the duties of his office, your Secretary is most grateful.

Respectfully submitted,

L. FERNALD FOSTER, M.D.
Secretary

TREASURER'S ANNUAL REPORT—1955

(To December 24, 1955, inclusive)

Mr. Chairman and members of The Council of the Michigan State Medical Society:

I herewith submit a report of the securities and cash belonging to the Michigan State Medical Society in my possession and in the Lansing office under my supervision as duly elected Treasurer for the year January, 1955, to January, 1956.

Listed below are the bonds and time certificates totalling $67,000.00 face value in lock box C-131, Michigan National Bank Trust Department in Grand Rapids.

3—Michigan National Bank Savings Certificates at $5,000.00 each	$15,000.00
7—United States Savings Bonds, Series G, at $5,000.00 each	35,000.00
5—United States Savings Bonds, Series G, at $1,000.00 each	5,000.00
4—United States Savings Bonds, Series K, at $1,000.00 each	4,000.00
8—United States Government notes 75-80 at $1,000.00 each	8,000.00
TOTAL:	$67,000.00

Listed below are the bonds and time certificates totalling $80,000.00 face value which are kept in the safe of the Michigan State Medical Society at 606 Townsend Street, Lansing. (Actual bonds are not on hand, only safekeeping receipts from the Michigan National Bank, Lansing.) The bonds are in trust with the First National Bank of Chicago.

U. S. Treasury Bonds 2½% due 3/15/70 optional 3/15/65 (Safekeeping Receipt No. A-726 dated 2/16/55)	$ 10,000.00
U. S. Treasury Bonds, Series K, 12 year maturity (Safekeeping Receipt No. A-718 dated 1/11/55)	45,000.00
Michigan National Bank Time Savings Certificate No. 6240 dated 3/16/55 at 2½% interest	25,000.00
TOTAL:	$ 80,000.00
Total Securities owned (Face Value)	$147,000.00

* * *

Balance of Treasurer's Account as of January 1, 1955	$4,848.01
Interest received from bonds and certificates of deposit, Jan. 1, 1955-Jan. 1, 1956	1,520.00
Balance on hand as of December 31, 1955	$6,368.01

March 15, 1955, government bonds in the amount of $15,000.00 face value were called and the money was reinvested in $15,000.00—2½% time certificates at the Michigan National Bank in Grand Rapids. The above statement includes interest on the time certificates from March 18 to September 18, 1955, only, as it is paid at the expiration of each six months.

* * *

Total deposits made into the Treasurer's commercial account—Michigan State Medical Society—during 1955:

February 5, 1955	$ 375.00
March 3, 1955	62.50
March 18, 1955	112.50
April 6, 1955	110.00
May 9, 1955	62.50
August 2, 1955	375.00
September 1, 1955	62.50
September 30, 1955	110.00
November 9, 1955	62.50
December 23, 1955	187.50
TOTAL	$1,520.00

Respectfully submitted,
Wm. A. Hyland, M.D.
Treasurer

EDITOR'S ANNUAL REPORT—1955

The Journal of the Michigan State Medical Society has now completed its fifty-fourth year and has published 640 numbers. Its founder, Andrew Porter Biddle, M.D., of Detroit, in the first issues established high ideals and set a goal toward which The Journal has constantly strived. The first and final reason for existence is to bind the membership of our Michigan State Medical Society into ever stronger and more cohesive affiliations; to bring to our members the latest in medical and surgical knowledge; to explain and expound our economic and professional problems; to bring to each member the consensus of thought and conference in all matters relating to the good of our patients; and to better the ability of our readers to perform for the best interests of all.

We have brought forward the political and social news as well as the economic interest; we have published in so far as we could, all the best advances in the science and art of medicine and we have reported the actions and proceedings of our elected officers and administrators. The editorial policy has continued its task of transmitting to our members circumstances and ideals bearing on the good of our people and of our own practice. The House of Delegates and The Council are our policy-making and interpreting bodies, one of which meets at least every month. Dozens of items or actual problems are discussed and decided at these meetings, and it has been our willing and useful function to express and present these facts to our members as fairly and explicitly as possible.

The past fifteen years have been significant ones. The economic stress—the urge toward socialization of the profession has been recognized and countered at all times. The editorial policy has been necessarily an economic and sociologic one rather than scientific. We have felt the scientific phase of our profession was suitably reflected in the many original papers, which our members have been encouraged to write and present. This year our register of authors is the longest ever—195, nineteeen appearing on two contributions and two names appearing with three listings. It indicates a healthy situation when that many ambitious members are willing to share their learning and ideals with the whole group. The preparation of a paper for publication is no small task and one for which we thank our authors in appreciation.

The number of pages published this year, 1,538, is not too much different from the past several years: in 1942—1,092 pages; 1943—1,022 pages; 1944—1,134 pages; 1945—1,414 pages; 1946—1,692 pages; 1947—1,476 pages; 1948—1,446 pages; 1949—1,566 pages; 1950—1,526 pages; 1951—1,470 pages; 1952—1,654 pages; 1953—1,414 pages; 1954—1,454 pages.

There have been prepared and published, fifty-two book reviews, sixty-six editorials and thirteen editorial comments. We have published nineteen In Memoriam items, including obituaries of four past presidents, Drs. Barstow, Hume, Keyport, and Luce. The Michigan State Medical Society has honored eight of our members for national presidency of medical societies and has published appreciations in The Journal.

The individualism of our covers has been continued now over a period of twelve years, no two being the same. In April, 1945, we started publishing pen pictures of our past presidents, officers, speakers, and others. In 1948, the covers were assigned to various activities and interests of the Society, a policy which has continued. A scrap book of all these covers is most illuminating as showing the broad scope of activities a State Medical Society may present. In 1955, our covers, and our especially designated numbers have been, January—Heart, emphasizing research, education, cardiac home-makers, and rheumatic fever control; February—Maternal Health, featuring a memorial to Alexander M. Campbell, M.D.; March—Arthritis; April—Cancer; May—"Grow Old Along With Me"; June—Medicine's Unsolved Problem—Blue Shield; July—90th Annual Session; August—Industrial Number; September—Coller-Penberthy-Thirlby number, with the roster as a second section; October—The Generalist; November—Tuberculosis and the Christmas Seal; December—Michigan Clinical Institute programs with illustration bearing on attendance.

The roster, which was published as a supplement and bound separately, contained 96 pages as compared to 76 pages a year ago.

We wish to express our thanks to the numerous members who have helped us gather the material for the many specialty numbers. We also express our gratefulness and appreciation to the Publication Committee and the Executive Committee for their continued help and counsel. The work has been most pleasant and stimulating.

Respectfully submitted.
Wilfrid Haughey, M.D.
Editor

REPORT OF MADAN AND BAILEY, CPA—1955

The Council, Michigan State Medical Society:

Pursuant to your request, we have examined the Statement of Financial Condition of the MICHIGAN STATE MEDICAL SOCIETY, Lansing, Michigan, as at December 24, 1955, and the related statements of income and expense and fund transactions for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the accompanying Statement of Financial Condition and related statements of income and expense and fund transactions, present fairly the position of the MICHIGAN STATE MEDICAL SOCIETY as at December 24, 1955, and the results of its operations for the year then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

The commercial account maintained at the Michigan National Bank, Lansing, Michigan, was reconciled by us, and further confirmed by direct correspondence with the bank as at December 24, 1955. The Michigan National Bank, Grand Rapids, Michigan, confirmed the balance in the Treasurer's account in a letter to the Society office dated December 23, 1955. Cash in the Lansing office, in an amount of $36.61, was counted by our representative. Detroit Petty Cash of $50.00 was not verified.

Confirmations of Accounts Receivable have been received from approximately fifty per cent of the debtors. We shall notify your office if any negative confirmations are received. An aging of the accounts by month of charge is as follows:

October, November, December	$7,377.39
July, August, September	149.56
Over Six Months	357.67
Employee Expense Advances	300.00
TOTAL	$8,184.62

The premiums due from employes for their share of the insurance plan, introduced on February 1, 1955, is to be received via the payroll check-off in the month of January, 1956. A summary of the premium cost for the first year is as follows:

	Total	*Society Share*	*Employee Share*
Premium—1 Year	$19,833.41	$10,663.25	$9,170.16
Refund—Deceased Employee	891.54	448.38	443.16
NET COST	$18,941.87	$10,214.87	$8,727.00
Monthly collections from employees	7,890.35		7,890.35
	$11,051.52		$ 836.65
Due from Employees in January, 1956	836.65		836.65
	$10,214.87	$10,214.87	-0-

Schedule 10 sets forth in detail the changes in your investments during the period, together with an analysis of interest received and amortization taken. Safekeeping certificates were presented to our representative in substantiation of $55,000.00 face value of U. S. Government Bonds. The $25,000.00 Time Certificate was presented for our inspection. The remaining $67,000.00 face value of investments, held by the Treasurer in the Michigan National Bank, Grand Rapids, Michigan, were confirmed by two letters, one from the Treasurer and one from the bank, to the Society office in Lansing, Michigan.

An analysis of real estate owned is set forth in Schedule #11.

The Statement of Financial Condition does not reflect the value of office equipment, such as furniture, movie projectors and similar items, as these assets are charged to expense when purchased.

Income of the Beaumont Memorial Restoration Fund, in an amount of $690.00, was composed of gifts from individuals and county societies. No expense was charged to this fund during the year under review.

A letter with recommendations for your consideration in relieving your office of some of its detailed bookkeeping procedures is submitted under separate cover.

Membership dues for the period were reconciled to the 5,375 paying members. Of the 5,853 cards used during the year, we were able to account for all but two.

Income derived from the sale of booth space at the Annual Session and the Michigan Clinical Institute was verified by us, and a test check of JOURNAL advertising was traced through the books of account.

The net gain from all sources was $20,673.79, the detail of which is set forth in Exhibit "C".

Respectfully submitted,
MADAN AND BAILEY
By KENNETH B. KNOSTMAN
Certified Public Accountant

January 6, 1956

INCOME AND EXPENSE SUMMARY

December 24, 1954, to December 24, 1955

	Balance 12-24-54	Income For the Period	Expense For the Period	Net Gain or —*Loss*	Balance 12-24-55
Equity—General Fund		$134,929.30	$132,981.76	$ 1,947.54	
Annual Session		29,505.00	26,163.56	3,341.44	
Michigan Clinical Institute	$ 73,452.24				$ 77,593.98
		12,746.00	14,934.29	—2,188.29	
THE JOURNAL		84,352.18	83,311.13	1,041.05	
Contingent Fund	29,390.82	7,876.52	0	7,876.52	37,267.34
Building Fund	11,770.04	10,502.00	8,483.58	2,018.42	13,788.46
Beaumont Memorial Fund*	—10,480.29	690.00	0	690.00	—9,790.29
Public Education Reserve	30,000.00	0	0	0	30,000.00
Public Education Program	76,816.26	33,022.36	33,344.60	—322.24	76,494.02
Public Service	3,330.00	18,378.50	21,427.22	—3,048.72	281.28
Professional Relations	6,545.92	27,567.71	27,308.33	259.38	6,805.30
Rheumatic Fever Control Program	13,645.55	26,100.00	17,041.31	9,058.69	22,704.24
TOTAL	$234,470.54	$385,669.57	$364,995.78	$20,673.79	$255,144.33
**Less:* Applicable to Beaumont Portion	—10,480.29	690.00		690.00	—9,790.29
TOTAL OTHER THAN BEAUMONT PORTION	$244,950.83	$384,979.57	$364,995.78	$19,983.79	$264,934.62

Note: The debit balance in the "Beaumont Fund" indicates that all funds have been expended, and in addition thereto the Society has advanced a total of $9,790.29.

STATEMENT OF FINANCIAL CONDITION

December 24, 1955

ASSETS		
CASH ON HAND AND IN BANKS:		
Michigan National Bank, Lansing, Michigan	$ 48,592.75	
Michigan National Bank, Grand Rapids Michigan (Treasurer's Account)	6,368.01	
Office Cash (Lansing and Detroit, Michigan)	86.61	$ 55,047.37
ACCOUNTS RECEIVABLE:		
Advertising, Advances and Other Items	$ 8,184.62	
Collection Expenses	103.37	
Due from Employees—Insurance Premiums	836.65	
	$ 9,124.64	
Less: Allowance for Doubtful Accounts	126.30	8,998.34
INVESTMENTS (Market or Redemption Value $144,389.13)		146.930.52
PROPERTY AND EQUIPMENT		
Land	$ 10,000.00	
Office Building $34,500.00		
Lot Adjoining Office Building 6,000.00		
Building Improvements 3,917.85		
Building Equipment 3,836.09		
Parking Lot 1,913.60	50,167.54	
	$ 60,167.54	
Less: Depreciation Allowance	6,877.76	53,289.78
OTHER ASSETS		
Prepaid Expenses	$ 761.12	
Funds Advanced to the Beaumont Memorial Restoration Fund	9,790.29	10,551.41
TOTAL ASSETS		$274,817.42
LIABILITIES		
ACCOUNTS PAYABLE:		
Federal Unemployment Tax	$ 194.31	
Michigan Unemployment Tax	7.16	
Unpaid Invoices	4,978.98	
Refunds Due County Societies	1,392.35	$ 6,572.80
DEFERRED INCOME:		
1956 MCI Booth Sales	$ 3,150.00	
1956 Membership Dues	160.00	3,310.00
TOTAL LIABILITIES		$ 9,882.80
SOCIETY EQUITIES:		
Reserved for Special Purposes		
Public Education Reserve $30,000.00		
Public Education Program 76,494.02	$106,494.02	
Public Service Account	281.28	
Professional Relations Account	6,805.30	
Rheumatic Fever Control Program	22,704.24	
Contingent Fund	37,267.34	
Building Fund	13,788.46	
TOTAL RESERVED	$187,340.64	
General Society Equity—12-24-54 $73,452.24		
Net Gain for Period (Exhibit "B") 4,141.74	77,593.98	
TOTAL EQUITIES		264,934.62
TOTAL LIABILITIES AND EQUITIES		$274,817.42

STATEMENT OF INCOME AND EXPENSE

December 24, 1954, to December 24, 1955

INCOME:		
Membership Dues	$131,526.25	
Miscellaneous	144.29	
Interest Income	3,241.12	
Amortization	17.64	$134,929.30
OTHER INCOME:		
Annual Session	$ 3,341.44	
Michigan Clinical Institute	—2,188.29	
THE JOURNAL	1,041.05	2,194.20
TOTAL INCOME		$137,123.50
EXPENSES:		
Administrative and General	$ 72,349.72	
Society Activity	37,091.11	
Committee Expenses	23,540.93	132,981.76
NET GAIN		$ 4,141.74

EXPENSES

December 24, 1954, to December 24, 1955

	Actual
ADMINISTRATIVE AND GENERAL:	
Printing, Mailing and Postage	$ 6,219.66
Office Supplies	2,918.59
Insurance and Fidelity Bonds	5,985.96
Auditing	650.00
Salaries—Administrative	10,200.12
General Office	19,419.68
General Counsel—Retainer	7,200.00
Expenses	1,893.03
Equipment and Repairs	1,501.76
Telephone and Telegraph	3,006.37
Payroll Taxes	1,678.03
Miscellaneous Expenses	790.76
Secretary's Office Expense	300.00
Employees' Retirement Trust	10,214.87
Residents' and Interns' Conference	362.89
TOTAL ADMINISTRATIVE AND GENERAL EXPENSES	$ 72,349.72
SOCIETY ACTIVITIES:	
Council Expense	$ 15,155.27
Delegates and Alternates to AMA	6,533.54
General Society Travel and Entertainment	7,190.59
Officers' Travel	4,196.67
Secretary's Letters	452.09
Woman's Auxiliary	600.00
Dues Collection Expense	2,362.95
Contributions	600.00
TOTAL SOCIETY ACTIVITY EXPENSES	$ 37,091.11
COMMITTEE EXPENSE:	
Legislative	$ 3,078.65
Postgraduate Medical Education	2,723.19
Preventive Medicine	61.02
Cancer Co-ordinating Committee	1,003.48
Child Welfare	401.45
Geriatrics	926.49
Industrial Health	135.68
Maternal Health	374.32
Civil Defense	744.62
Mental Health	678.26
Scientific Radio	421.81
Venereal Disease	29.49
Tuberculosis Control	237.77
Michigan Health Council	10,000.00
Rural Medical Service	89.07
Highway Accident Committee	302.65
Beaumont Memorial Restoration	438.28
Permanent Conference Committee	110.02
Sundry Committee Expense	1,784.68
TOTAL COMMITTEE EXPENSES	$ 23.540.93
TOTAL EXPENSES	$132,981.76

ANNUAL SESSION

December 24, 1954, to December 24, 1955

	Actual
INCOME:	
Booth Sales (125 Spaces)	$ 29,505.00
TOTAL INCOME	$ 29.505.00
EXPENSES:	
Scientific Meeting	$ 4,235.56
Registration	232.92
Exhibit Expense	5,056.10
Hotel Expense (MSMS Staff)	495.82
Officers' Night	339.48
State Society Night	4,719.81
Printing, Mailing & Postage	2,811.45
Press Expense	1,125.52
Scientific Work Committee	355.36
Salaries	4,486.25
House of Delegates	1,203.95
Telephone and Telegraph	0
Miscellaneous and Travel	1,101.34
TOTAL EXPENSES	$ 26,163.56
GAIN ON ANNUAL SESSION	$ 3,341.44

MICHIGAN CLINICAL INSTITUTE

December 24, 1954, to December 24, 1955

	Actual
INCOME:	
Booth Sales (74 Spaces)	$ 12,746.00
TOTAL INCOME	$ 12,746.00
EXPENSES:	
Scientific Meeting	$ 2,799.13
Registration	95.70
Exhibit	3,104.72
Hotel and Entertainment	789.90
Printing, Mailing and Postage	2,953.46
Press Expense	1,805.90
Salaries	2,386.11
Miscellaneous	999.37
TV	0
TOTAL EXPENSES	$ 14,934.29
LOSS ON MCI	$—2,188.29

THE JOURNAL

December 24, 1954, to December 24, 1955

	Actual
INCOME:	
Allocation from Dues	$ 7,876.46
Subscription of Others	718.03
Advertising Sales	71,717.02
Reprint and Cut Sales	3,193.83
Miscellaneous (Cash Discounts)	846.84
TOTAL INCOME	$ 84,352.18
EXPENSES:	
Editor's Expense	$ 3,000.00
Printing, Mailing and Postage	48,282.03
Reprint and Cut	2,861.02
Salaries	13,276.40
Discounts and Commissions	15,657.92
Miscellaneous	110.66
Cash Discounts Allowed	123.10
TOTAL EXPENSES	$ 83,311.13
GAIN ON THE JOURNAL	$ 1,041.05

PROFESSIONAL RELATIONS ACCOUNT

December 24, 1954, to December 24, 1955

	Actual
INCOME:	
Allocation from Dues	$ 27,567.71
TOTAL INCOME	$ 27,567.71
EXPENSES:	
Committee Meetings and Awards	$ 172.99
Postage, Mailing and Printing	77.78
Rent to Wayne County Medical Society	480.00
Salaries	13,957 87
Telephone and Telegraph	1,214.69
Travel and Entertainment	4,565.21
National Meeting Expense	1,378.56
Public Relations—County Secretary's Conference	2,411.00
County Society Meetings	1,082.46
Woman's Auxiliary	1,728.76
Miscellaneous	14.76
Field Secretary's Office	175.00
Field Secretary's Meetings	49.25
TOTAL EXPENSES	$ 27,308.33
GAIN DURING PERIOD	$ 259.38

PUBLIC SERVICE ACCOUNT

December 24, 1954, to December 24, 1955

	Actual
INCOME:	
Allocation from Dues	$ 18,378.50
TOTAL INCOME	$ 18,378.50
EXPENSES:	
Salaries	$ 17,343.23
Telephone and Telegraph	795.96
Travel and Entertainment	3,081.25
Rural Health Conference	206.78
TOTAL EXPENSES	$ 21,427.22
LOSS DURING PERIOD	$—3,048.72

RHEUMATIC FEVER CONTROL PROGRAM

December 24, 1954, to December 24, 1955

	Actual
INCOME:	
Grant from Michigan Heart Association	$ 26,025.00
Detroit Center	75.00
TOTAL INCOME	$ 26,100.00
EXPENSES: (Central Office)	
Committee Meetings	$ 453.97
Payroll Taxes	211.64
Printing, Mailing and Postage	1,209.60
Publications and Pamphlets (Purchased)	137.50
Salaries—Administrative	7,333.28
Office	389.22
Travel	874.45
Laboratory Aid Plan	259.00
TOTAL CENTRAL OFFICE EXPENSES	$ 10,868.66
CONTROL CENTERS:	
Alpena	$ 400.00
Ann Arbor	308.50
Bay City	780.00
Benton Harbor	180.00
Grand Rapids and Muskegon	3,076.70
Kalamazoo	1,080.20
Lansing	16.00
Pontiac and Royal Oak	65.25
Traverse City	266.00
TOTAL CONTROL CENTERS	$ 6,172.65
TOTAL EXPENSES	$ 17,041.31
GAIN DURING PERIOD	$ 9,058.69

PUBLIC EDUCATION PROGRAM

December 24, 1954, to December 24, 1955

	Actual
INCOME:	
Allocation from Dues	$ 32,818.81
Miscellaneous (Income)	203.55
TOTAL INCOME	$ 33,022.36
EXPENSES:	
Clipping Service	$ 302.16
Committee Meetings	502.12
Equipment and Repairs	479.67
Printing, Mailing and Postage	3,524.94
Office Supplies	1,091.53
Salaries	13,957.47
Telephone and Telegraph	1,479.31
Travel and Entertainment	4,921.72
Cinema	2,357.27
Display Advertising	1,150.06
Publications and Pamphlets	3,034.22
Radio and TV	0
Miscellaneous	544.13
TOTAL EXPENSES	$ 33,344.60
LOSS DURING PERIOD	$ —322.24

BUILDING MAINTENANCE FUND

December 24, 1954, to December 24, 1955

	Actual
INCOME:	
Allocation from 1955 Dues	$ 10,502.00
TOTAL INCOME	$ 10,502.00
EXPENSES:	
Decorating	$ 204.50
Landscaping	45.83
Utilities	1,017.72
Janitor—Salary	3,318.24
Supplies	47.94
Taxes—Property	870.96
Insurance	348.48
General Repairs	362.88
Depreciation	1,727.69
Window Cleaning	260.00
Miscellaneous	215.05
Reception Room Furnishings	64.29
TOTAL EXPENSES	$ 8,483.58
GAIN ON BUILDING MAINTENANCE FUND	$ 2,018.42

SECURITIES OWNED
December 24, 1955

	Maturity Date	Face Value	Cost 12-24-54 (Book Value)	Redemption Prices 12-24-55	Purchases During Period	Sales or Reductions During Period	Amortization Debit or Credit	Cost 12-24-55 (Book Value)	Interest Received or Accrued
UNITED STATES GOVERNMENT SECURITIES:									
Savings Bonds—Series "G" (Note 1)	5-1-58	$ 5,000.00	$ 5,000.00	$ 4,880.00				$5,000.00	$ 125.00
Savings Bonds—Series "G" Note 1)	3-1-60	5,000.00	5,000.00	4,820.00				5,000.00	125.00
Treasury Notes—Series "A"—1½% (Note 1)	3-15-55		15,000.00			$15,000.00			112.50
Treasury Bonds—Series "B"—2¾% (Note 1)	4-1-80/75	8,000.00	8,178.50	8,000.00			$—8.92	8,169.58	220.00
Treasury Certificates of Indebtedness Series "A"—1⅝%	2-15-55		10,000.00			10,000.00			162.50
Savings Bonds—Series "K"—2.76%	6-1-66	45,000.000	45,000.00	44,055.00				45,000.00	1,242.00
Savings Bonds—Series "K"—2.76% (Note 1)	7-1-66	4,000.00	4,000.00	3,916.00				4,000.00	110.40
Treasury Bond—2½%	3-15-70/65	10,000.00		9,528.13	$ 9,734.38		26.56	9,760.94	250.00
Time Certificate—Michigan National Bank (Note 1) 2½% Dated 3-18-55	Six Months Notice Subject to Renewal	15,000.00		15,000.00	15,000.00			15,000.00	—105.66 187.50
Time Certificate—Michigan National Bank (Lansing, Michigan) 2½% Dated 3-16-55	Six Months Notice Subject to Renewal	25,000.00		25,000.00	25,000.00			25,000.00	
BONDS HELD FOR PUBLIC EDUCATION PROGRAM:									
Savings Bonds—Series "G" (Note 1)	8-1-58	30,000.00	30,000.00	29,190.00				30,000.00	750.00
TOTAL BONDS		$147,000.00	$122,178.50	$144,389.13	$49,734.38	$25,000.00	$17.64	$146,930.52	$3,179.24
Note Receivable—2½%, Demand			3,000.00			3,000.00		0	61.88
TOTAL SECURITIES		$147,000.00	$125,178.50	$144,389.13	$49,734.38	$28,000.00	$17.64	$146,930.52	$3,241.12

Note 1: Bonds held by the Treasurer in The Michigan National Bank, Grand Rapids, Michigan.

PROPERTY AND DEPRECIATION ALLOWANCE
December 24, 1955

	Date Acquired	Cost	Depreciation Allowance Prior Years	Remaining Cost 12-24-54	Estimated Life (Years)	Depreciation Expense 1955	Depreciation Allowance 12-24-55
Land	1951	$10,000.00	$ 0	$10,000.00		$ 0	$ 0
Building	1951	34,500.00	3,900.00	30,600.00	30	1,150.00	$5,050.00
		$44,500.00	$3,900.00	$40,600.00		$1,150.00	$5,050.00
BUILDING IMPROVEMENTS:							
New Building Entrance	1953	$ 3,917.85	$ 195.90	$ 3,721.95	30	$ 130.60	$ 326.50
BUILDING EQUIPMENT:							
Lighting	1952	$ 2,121.50	$ 424.29	$ 1,697.21	15	$ 141.43	$ 565.72
Boiler	1952	1,714.59	342.84	1,371.75	15	114.30	457.14
		$ 3,836.09	$ 767.13	$ 3,068.96		$ 255.73	$1,022.86
PARKING LOT	1953	$ 1,913.60	$ 287.04	$ 1.626.56	10	$ 191.36	$ 478.40
LOT ADJOINING OFFICE BUILDING		$ 6,000.00	$ 0	$ 6,000.00		$ 0	$ 0
TOTAL		$60,167.54	$5,150.07	$55,017.47		$1,727.69	$6,877.76

1956 BUDGET ESTIMATES

GENERAL FUND

ACCOUNT TITLE	1956 Estimate
INCOME:	
5,000 members @ $55.00	$275,000.00
Less:	
$1.50 to THE JOURNAL	7,500.00
$6.25 to Public Education	31,250.00
$3.50 to Public Service	17,500.00
$5.25 to Professional Relations	26,250.00
$3.00 to Contingent Fund	15,000.00
$2.00 to Building Fund	10.000.00
$5.00 to Public Education Reserve	25,000.00
Balance to General Fund: @ $28.50	142,500.00
Interest & Miscellaneous Income	3,000.00
TOTAL FUNDS AVAILABLE	$145.500.00
EXPENSES: (Administrative & General)	
Printing, Mailing & Postage	$ 6,500.00
Office Supplies	3,000.00
Insurance & Bonds	5,986.00
Auditing	750.00
Salaries: Adm. & Office	35,000.00
General Counsel Retainer & Exp	8,900.00
Equipment & Repairs	1,500.00
Telephone & Telegraph	3,000.00
Taxes (Other than property)	2.000.00
Misc. Expense & Contributions	1.400.00
Employee's Retirement Trust	10,331.37
Total Administrative & General Expenses	$ 78,367.37
EXPENSES: (Society Activities)	
Council Expense	$ 15,000.00
AMA Delegates & Alternates	7,000.00
General Society Travel & Entertainment	7,200.00
Officers Travel	4,200.00
Secretary's Letters & Office Expenses	900.00
Woman's Auxiliary	600.00
Dues Collection Expense	2,750.00
Total Society Activities Expenses	$ 37,650.00
EXPENSES: (Committees)	
Cancer Coordinating Committee	$ 1,000.00
Child Welfare	400.00
Civil Defense	600.00
Geriatrics	800.00
Industrial Health	200.00
Legislative	3,000.00
Maternal Health	400.00
Mental Health	400.00
Michigan Health Council	10,000.00
Postgraduate Medical Education	4,000.00
Preventive Medicine	100.00
Permanent Conference	200.00
Rural Medical Service	200.00
Scientific Radio	1,400.00
Tuberculosis Control	200.00
Venereal Disease	200.00
Beaumont Memorial Restoration	900.00
Highway Accident Committee	300.00
Sundry Committee Expense	1,800.00
Bi-Annual Report (Rheumatic Fever)	1,000.00
Total Committee Expense	$ 27,100.00
TOTAL GENERAL FUND EXPENSES	$143,117.37

GAIN OR LOSS FOR THE YEAR (GAIN)	2,382.63
BALANCE FOR PRIOR YEARS	77,597.98
	79,980.61
NET GAIN OR LOSS FROM ANNUAL SESSION, M.C.I. and JOURNAL	—0—
BALANCE TO 1957	$ 79,980.61

BUILDING MAINTENANCE FUND

INCOME:

Allocation from membership dues	$ 10,000.00

EXPENSES:

Maintenance: Utilities, decorating, supplies, yard work, etc.	3,000.00
Salaries: Janitor	3,000.00
Property Taxes	900.00
Insurance: Fire & Liability	350.00
Depreciation	1,750.00
Furnishings	500.00
Miscellaneous	—0—
Total Building Maintenance Expenses	9,500.00
GAIN OR LOSS FOR THE YEAR (GAIN)	500.00
Balance from prior years	13,788.46
Balance to 1957	$ 14,288.46

CONTINGENT FUND (Surplus)

INCOME:

Allocation from membership dues	$ 15,000.00
Balance from prior years	37,267.34
TOTAL	$ 52,267.34

ANNUAL SESSION

INCOME:

Booth Sales: 99 spaces	$ 22,600.00

EXPENSES:

Scientific Meeting Expense	4,600.00
Exhibit Expense	2,600.00
Registration & Hotel Expense	1,000.00
State Society & Officers Night	3,950.00
Promotion: Printing, Mailing, Postage & Scientific Work Committee	2,850.00
Press Expense	1,200.00
Salaries	5,000.00
House of Delegates Expense	1,000.00
Miscellaneous Expenses	400.00
Total Annual Session Expense	$ 22,600.00
GAIN OR LOSS ON ANNUAL SESSION	—0—

MICHIGAN CLINICAL INSTITUTE

INCOME:

Booth sales: 71 spaces	$ 12,200.00

EXPENSES:

Scientific Meeting	2,500.00
Exhibit Expense	3,000.00
Registration & Hotel	900.00
Promotion: Printing, Mailing, Postage and Committee Meetings	2,800.00
Press Expense	1,200.00
Salaries	1,400.00
Residents & Interns Conference	100.00
Miscellaneous Expenses	300.00
Total Michigan Clinical Institute Expenses	$ 12,200.00
GAIN OR LOSS ON M.C.I.	—0—

PUBLIC EDUCATION ACCOUNT

INCOME:

Allocation from membership dues	$ 31,250.00
Other Income	—0—
Total Income	$ 31,250.00

EXPENSES:

Committee Meetings	500.00
Equipment & Repairs	500.00
Printing, Mailing & Postage	2,500.00
Office Supplies	1,000.00
Salaries	16,700.00
Telephone & Telegraph	1,500.00
Travel & Entertainment	5,000.00
Exhibit Expenses	1,000.00
Publications, pamphlets, clippings	2,720.00
Radio, TV and Cinema	6,000.00
Miscellaneous Expense	200.00
Total Expenses	$ 37,620.00
GAIN OR LOSS FOR THE YEAR (LOSS)	—6,370.00
BALANCE FROM PRIOR YEARS	76,128.89
Total to 1957	$ 69,758.89

THE JOURNAL

INCOME:

Allocation from membership dues	$ 7,500.00
Subscriptions—non-members	700.00
Advertising Sales	72,000.00
Reprint & Cut Sales	3,200.00
Miscellaneous Income	500.00
Total Income	$ 83,900.00

EXPENSES:

Editor's Expense	3,000.00
Printing, Mailing & Postage	49,000.00
Reprint & Cut Expense	3,000.00
Salaries	12,700.00
Discount & Commissions	16,000.00
Miscellaneous Expenses	200.00
Total Expenses	$ 83,900.00
GAIN OR LOSS ON THE JOURNAL	—0—

PUBLIC SERVICE ACCOUNT

INCOME:

Allocation from membership dues	$17,500.00

EXPENSES:

Salaries	16,500.00
Telephone & Telegraph	1,000.00
Travel & Entertainment	5,000.00
Rural Health Conference	250.00
Miscellaneous Expenses	—0—
Committee Meetings	100.00
Total Expenses	$ 22,850.00
GAIN OR LOSS FOR THE YEAR (LOSS)	—5,350.00
BALANCE FROM PRIOR YEARS	314.78
Balance to 1957 (Loss)	—5,035.22

PROFESSIONAL RELATIONS

INCOME:

Allocation from membership dues	$ 26,250.00

EXPENSES:

Rent to Wayne County Medical Society	500.00
Salaries	16,500.00
Telephone & Telegraph	1,200.00
Travel and Entertainment	5,000.00
National Meeting Expense	2,500.00
County Secretaries-PR Conference	3,500.00
County Societies & Field Secretaries meetings	1,400.00
Woman's Auxiliary	1,000.00
Miscellaneous Expenses	100.00
Committee Meetings	500.00
Printing, Mailing & Postage	750.00
Total Expenses	$ 32,950.00
GAIN OR LOSS FOR THE YEAR (LOSS)	—6,700.00
BALANCE FROM PRIOR YEARS	7,136.93
Balance to 1957	$ 436.93

RHEUMATIC FEVER CONTROL PROGRAM

INCOME:

From Michigan Heart Association	$ 7,345.76

EXPENSES (Central Office)

Committee Meetings	500.00
Equipment & Repairs	450.00
Payroll Taxes	300.00
Printing, Mailing & Postage	1,500.00
Office Supplies	200.00
Publications & Pamphlets	100.00
Salaries: Administrative & Office	11,600.00
Travel	1,500.00
Fellowships	3,000.00
Telephone & Telegraph	100.00
Laboratory Aid Plan	1,000.00
Miscellaneous Expenses	—0—
Total Central Office Expenses	$ 20,250.00

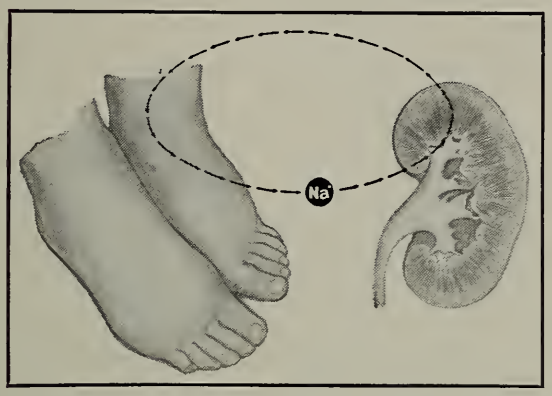
EXPENSES: (Control Centers)

Alpena	300.00
Ann Arbor	300.00
Bay City	1,000.00
Benton Harbor	200.00
Detroit	1,000.00
Grand Rapids & Muskegon	4,000.00
Jackson	100.00
Kalamazoo	1,000.00
Lansing	100.00
Petoskey	100.00
Pontiac & Royal Oak	200.00
Saginaw	200.00
Sault Ste. Marie	100.00
Traverse City	1,200.00
Total Control Center Expense	9,800.00
Total Rheumatic Fever Expenses	30,050.00
GAIN OR LOSS FOR THE YEAR (LOSS)	—22,704.24
BALANCE FROM PRIOR YEARS	22,704.24
Balance to 1957	—0—

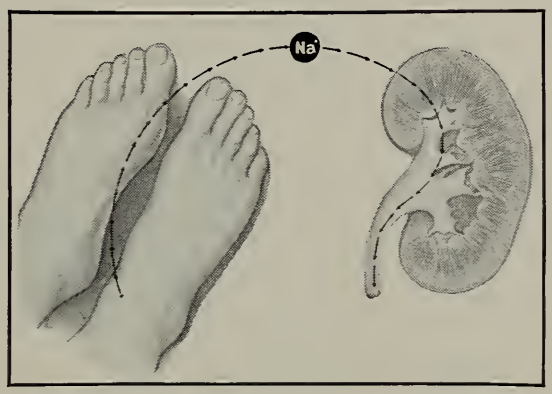
MICTINE* — ORAL NON-MERCURIAL DIURETIC

New Orally Effective Diuretic for Congestive Edema

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WITHOUT MICTINE — *Prior to diuretic therapy excessive sodium and water are characteristically retained in the edematous patient.*



WITH MICTINE — *Inhibition of the reabsorption of sodium ion leads to an increased excretion of sodium ion, water and chloride.*

An effective diuretic has been described as one which causes excretion of water, sodium and chloride in amounts sufficient to reduce the edema but not to result in salt depletion.

Mictine (brand of aminometradine) introduces to clinical practice an *improved* diuretic which not only meets the standard qualifications but has these seven additional advantages:

Mictine is orally effective; it is not a mercurial; it has no known contraindications; it does not upset the acid-base balance; it exerts no significant influence on electrolyte balance; it may be given in the presence of renal or hepatic diseases; it is well tolerated.

As with most effective therapeutic agents, in high dosage Mictine may cause some side effects in some patients; however, on three tablets daily side effects (anorexia and nausea, rarely vomiting, diarrhea or headache) are minimal or absent.

Clinically, Mictine is useful in the maintenance of an edema-free state in all patients and for initial and continuing diuresis in mild or moderate congestive failure. It is not intended for initial diuresis in severe congestive failure unless either sensitivity or tolerance to other diuretics has developed in the patient.

The maintenance dosage of Mictine, as well as for initial diuresis in mild or moderate congestive heart failure, is one to four 200-mg. tablets daily in divided doses; the dosage for initial diuresis in severe congestive failure, under the conditions already described, is four to six tablets daily. For either use, it is recommended that Mictine be prescribed with meals on interrupted dosage schedules; that is, prescribing Mictine on alternate days or for three consecutive days and omitting it the next four days.

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Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

MICHIGAN'S POLIO VACCINE—SUMMED UP

As of January 31, Michigan has had 727,356 doses of poliomyelitis vaccine available for distribution. All of this vaccine was distributed to the local health jurisdictions based on the percentage of children 1 through 14 in each of the jurisdictions in relation to the total number of 1 through 14 children in the entire state.

Under the preceding National Foundation for Infantile Paralysis program, Michigan received 615,765 doses of the vaccine which were given to first and second grade children.

The total number of eligibles in Michigan in the 1 through 14 age group plus pregnant women amounts to 2,000,000 persons. Since optimum protection requires three doses per person, it is obvious that we have had available just slightly over 20 per cent of the 6,000,000 doses needed.

LEGIBILITY REQUIRED BY LAW

The Michigan Department of Health would like to draw to the attention of all persons involved in the preparation of birth certificates, death certificates and burial permits that it is a statutory requirement that all information contained on these forms be either typewritten or legibly printed, with, of course, the exception of signatures. With reference to signature, the statute requires that the signer of any of these documents shall have typed or legibly printed under such signature, the name signed above.

FOR PARENTS OF PRESCHOOL DEAF AND HARD-OF-HEARING CHILDREN

The department is again co-operating with the Michigan School for the Deaf in its annual Parent Institute-Nursery School for preschool deaf and hard-of-hearing children and their parents to be held at the School in Flint, March 18-23. The institute is free to both parents and children who are residents of Michigan. Information may be obtained from the Michigan School for the Deaf, Flint 2, or from the Michigan Department of Health.

"BABY IDENTIFICATION IN HOSPITALS"

A new pamphlet issued by the department, "Baby Identification in Hospitals," pictures the step-by-step procedure in one Michigan hospital of palmprinting newborn babies and fingerprinting their mothers. The Identification Bureau of the Michigan State Police considers palmprints of babies and fingerprints of their mothers the most reliable means of identification. The palmprint reveals more line pattern changes than does the footprint and these changes are the distinguishing characteristics of the print. The pamphlet is available from the department upon request.

NEW VD FILM, "THE INVADER," AVAILABLE

The new motion picture, "The Invader," which deals with the historical background of the diagnosis and treatment of syphilis, is obtainable through local health departments and from the film loan library of the Michigan Department of Health. Information on the film may be secured from either source.

WORKSHOP FOR TEACHERS OF EXPECTANT PARENT CLASSES

The Michigan Department of Health and the Clara Elizabeth Fund are sponsoring an annual workshop for teachers of expectant parent classes at Haven Hill on April 9, 10 and 11. The purpose of the workshop is to offer assistance to a selected number of nurses in the organization and teaching of classes for expectant parents.

"WHAT TO EAT BEFORE AND AFTER THE BABY COMES"

The department's folder, "What to Eat Before and After the Baby Comes," has been revised and is again available to physicians wishing to use it with prenatal cases.

EXTERNSHIP TRAINING PROGRAM TO CONTINUE

The externship training program for sophomore and junior medical students, begun by the department in 1952, will be continued this summer. Provision has been made for the employment of externs, probably six, for ten weeks of work experience in local health departments during the summer vacation.

The extern program has had two major objectives. One is to provide selected students with an opportunity to observe and participate in an official public health program, giving them firsthand knowledge of the role of the health department in safeguarding community health and possibly interesting them in public health as a career. The second objective is to provide added personnel for carrying on special projects or providing added emphasis to certain programs.

The classic triad of symptoms of renal neoplasms is hematuria, pain and mass.

* * *

The classic histologic analysis of biopsy material still remains the most reliable diagnostic test.

* * *

There are no qualitative or quantitative tests, either chemical, enzymatic or serologic, by which neoplastic growth can be diagnosed in the blood or in other body fluids.

* * *

Suppression of lactation is an important factor in breast cancer.



Typical Sanka Booth At Medical Conventions All Over The Country

You said, "THIS IS REAL COFFEE!"

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***"Real* coffee**—delicious coffee!" Such was your enthusiastic comment at medical conventions—when you tasted Instant Sanka at the Instant Sanka booth.

And, Doctor, you couldn't be more right. Since only the caffein has been removed from Instant Sanka Coffee, all the pure coffee goodness is there for you to enjoy.

Why not share the good news with your patients? If they're sensitive to caffein—if they're sensitive to good coffee flavor—then Instant Sanka Coffee is for them!

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. NEWS MEDICAL

MICHIGAN AUTHORS

George L. Waldbott, M.D., Detroit, is the author of an article entitled "Chronic Fluorine Intoxication from Drinking Water," published in the *International Archives of Allergy and Applied Immunology,* Vol. 7, No. 2, 1956. He was the author of an article on the same subject published in Italian in *Folio Clinica Internacional,* April, 1955.

W. W. Ackermann and **H. Kurtz,** Ann Arbor, are the authors of an article entitled "Observations Concerning a Persisting Infection of Hela Cells with Poliomyelitis Virus," published in the *Journal of Experimental Medicine,* November 1, 1955.

George L. Waldbott, M.D., Detroit, is the author of an article entitled "Ocular Allergy from the Allergist's Point of View," published by invitation, in the *Transactions of the American Academy of Ophthalmology and Otolaryngology,* July-August, 1955.

G. C. Brown, Ann Arbor, is the author of an article entitled "Effect of Booster Inoculations on the Serologic Status of Children Vaccinated with Poliomyelitis Vaccine," published in the *American Journal of Public Health,* November, 1955.

Harry C. Saltzstein, M.D., Detroit, is the author of an article entitled "The Follow-up Examination for Cancer—With Comments on Diagnosis," published in *Harper Hospital Bulletin,* November-December, 1955.

Harold Henderson, M.D., and **Harold Mack, M.D.,** Detroit, are the authors of an article entitled "Program Highlights—1955 Meeting, American Association of Obstetricians and Gynecologists," published in *Harper Hospital Bulletin,* November-December, 1955.

Joseph C. Erwin, M.D., Detroit, is the author of an article entitled "Bone Marrow Aspiration—A Note to House Officers," published in *Harper Hospital Bulletin,* November-December, 1955.

Irving B. Shulak, M.D., and **Abraham Becker, M.D.,** Detroit, are the authors of an article entitled "Psychosis Following Acute Myocardial Infarction—Case Report," published in *Harper Hospital Bulletin,* November-December, 1955.

Roderick P. MacDonald, M.D., Detroit, is the author of an article entitled "Chemical Laboratory and Physician—Partners in Medical Progress," published in *Harper Hospital Bulletin,* November-December, 1955.

Vance Fentress, M.D., and **David J. Sandweiss, M.D.,** Detroit, are the authors of an article entitled "Tubeless Gastric Analysis—Preliminary Report," published in *Harper Hospital Bulletin,* November-December, 1955.

J. S. DeTar, M.D., Milan, is the author of an article entitled "What Kind of Doctor Do You Need?" published in Parade section of the *Detroit Free Press,* February 5, 1956.

M. K. Newman, M.D., Detroit, is the author of an article entitled "Ultrasonics in Neurofibromatosis," published in *Transactions of the American Institute of Ultrasonics and Medicine,* January, 1956. Associated authors were A. S. Goldstein, M.D., Marjorie Hoff, R.P.T., and Robert Simms, R.P.T.

J. M. Hammer, M.D., and **P. H. Seay, Ph.D.,** Kalamazoo, and **E. J. Hill, M.D., F. W. Prust, M.D.,** and **R. B. Campbell,** Detroit, are the authors of an article entitled "Surgery Illustrated. Intestinal Segments as Internal Pedicle Grafts," published in *A.M.A. Archives of Surgery,* October, 1955.

Thomas Francis, Jr., M.D., Ann Arbor, is the author of an article entitled "Virus Problems in Medicine," presented as the Oration in Medicine at the annual meeting of the Illinois State Medical Society, Chicago, May 18, 1955, and published in the *Illinois Medical Journal,* November, 1955.

J. S. DeTar, M.D., Milan, is the author of an article entitled "The Problems and Future of General Practice," published in *GP,* January, 1956. A similar version of this article is being published simultaneously in *The Modern Hospital.*

L. J. Hirschman, M.D., Traverse City, **Norman D. Nigro, M.D.,** Detroit, and **Ralph M. Burke, M.D.,** Detroit, are authors of an original article "The Scope of Office Proctology" which appeared in the *Surgical Clinics of North America,* October, 1955.

H. M. Nelson, M.D., Detroit, is author of an original article, "Progress is Being Made in Cancer Control," which was published in the *Philippine Medical World,* October, 1955.

* * *

The Defense Department gave final approval, Friday, January 6, to a directive establishing captaincy in the Army or Air Force, and lieutenancy in the Navy as starting grades in the medical and dental corps.

* * *

Jack S. Guyton, M.D., Detroit, and **John E. Magielski, M.D.,** Ann Arbor, are to be on the faculty of the Twenty-ninth Annual Spring Congress of the Gill Memorial Eye, Ear and Throat Congress which is to be held April 2 to 7, 1956, in Roanoke, Virginia.

* * *

Parent Institute Nursery School.—In order to accelerate the early educational and social development of deaf and hard-of-hearing children through the instruction of their parents, the Michigan School for the

(Continued on Page 342)

What makes Viceroy different from other filter cigarettes?



The VICEROY filter tip contains 20,000 tiny filters made exclusively from pure cellulose . . . soft, snow-white, natural. This is twice as many filters as the other two largest-selling filter brands.

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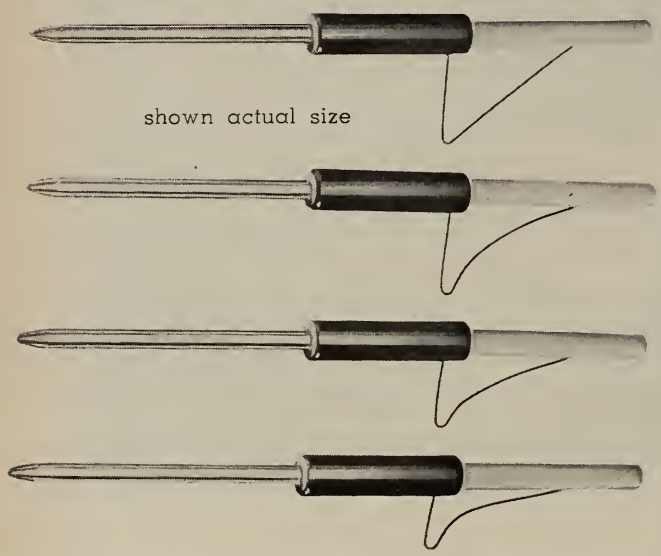


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**Described in his paper which will be sent on request*

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Jackson, Michigan

(Continued from Page 340)

Deaf in Flint is holding its Sixteenth Annual Session March 18 to March 23, 1956. Among the speakers for the lecture series are Mr. Bruce R. Siders, superintendent of the Michigan School for the Deaf; Dr. Kendall Hooper, Flint otologist; Miss Margaret H. Fitzgerald, principal of the St. Mel-Holy Ghost Day School for the Deaf in Chicago; Dr. Ralph Rabinovitch, chief of the Children's Service, University Hospital Neuropsychiatric Institute, Ann Arbor; and Miss Mary Blair, consultant in the education of physically handicapped, Michigan Department of Public Instruction. The featured speaker for the banquet, March 23, is Dr. Clarence O'Connor, superintendent of the Lexington School for the Deaf, New York.

* * *

The Staff of Mt. Carmel Mercy Hospital, Detroit, presented their Seventeenth Annual Clinic Day on Wednesday, January 25, 1956. L. W. Gardner, M.D., and W. A. Chipman, M.D., were co-chairmen.

* * *

The Twenty-Ninth Annual Congress in Ophthalmology, Otology, Rhinology, Laryngoscopy, Faciomaxillary Surgery, Bronchoscopy and Esophagoscopy, will be held at Gill Memorial Hospital in Roanoke, Virginia, April 2 to 7, 1956. Two Michigan men will be guest speakers—Jack S. Guyton, M.D., of Detroit, and John E. Magielski, M.D., of Ann Arbor. Other Michigan men who have been guest lecturers of former courses are: Ferris Smith, M.D., Grand Rapids; A. C. Furstenberg, M.D., Ann Arbor; Claire L. Straith, M.D., Detroit; J. H. Maxwell, M.D., Ann Arbor; A. D. Ruedemann, M.D., Detroit; Bruce Fralick, M.D., Ann Arbor; Harold F. Falls, M.D., Ann Arbor; Russell N. DeLong, M.D., Ann Arbor; Jerry W. Conn, M.D., Ann Arbor; H. Saul Sugar, M.D., Detroit; Richard Schneider, M.D., Ann Arbor; John Sheldon, M.D., Ann Arbor.

* * *

The Ninth Annual Rural Health Conference was held in Kalamazoo on January 19 and 20, 1956. The General Conference Chairman was Milon Grinnell, East Lansing, Editor of *Michigan Farmer.* The Local Chairman was E. Gifford Upjohn, M.D., Kalamazoo, President of the Upjohn Co.

* * *

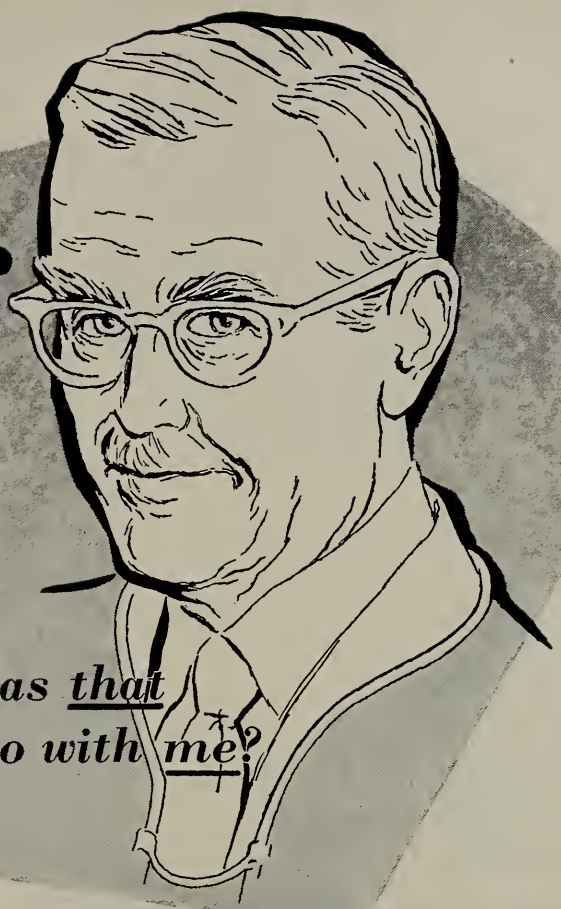
Diagrams and photographs of experimental surgery by J. M. Hammer, M.D. and P. H. Seay, Ph.D., of Kalamazoo and E. J. Hill, M.D., and R. B. Campbell, M.D., of Detroit, and F. W. Prust, M.D. (USN) are reproduced in beautiful color plates in the magazine *Scope,* published quarterly by The Upjohn Company, Kalamazoo. The plates are from articles published in AMA *Archives of Surgery,* 67:23, 1953; 69:198, 1954; 71:625, 1955, and from the*Journal of the International College of Surgeons,* 23:500, 1955.

* * *

Mark F. Osterlin, M.D., medical director of the Central Michigan Children's Clinic at Munson Hos-

(Continued on Page 344)

Bovie?..

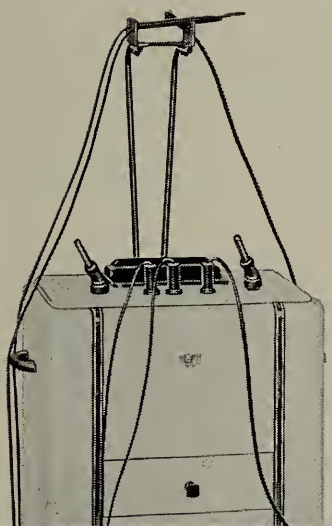


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The "little" Bovie is proving a *big* help to doctors interested in doing *more* for their patients. Have *you* considered the OFFICE BOVIE for use in your office? Thousands of doctors *are* using it daily for a host of useful minor surgical techniques. *We'd like to send you, without obligation, an interesting 6-page illustrated brochure on this important subject . . .*



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(Continued from Page 342)

pital in Traverse City, has received the Traverse City Chamber of Commerce annual award as the Outstanding Citizen of 1955. Dr. Osterlin's selection was based on long but little recognized service to Traverse City and surrounding areas over a period of 20 years. Dr. Osterlin has been one of the motivating figures in the growth and development of Munson Hospital. He is an outstanding pediatrician and a member of the faculty of the medical school of the University of Michigan. In addition, he was one of the early promoters of the National Music Camp, has played an important part in the founding and development of Northwestern Michigan College, the Traverse City Symphony and other cultural projects.

* * *

Wayne University College of Medicine held its Fifth Annual Symposium on Blood on January 21, 1956. The committee consisted of Walter H. Seegers, M.D., E. A. Sharp, M.D., and Calvin H. Hughes.

* * *

A summer camp for diabetic children will be opened for the eighth season under the auspices of the Chicago Diabetes Association from July 15, 1956, to August 5, 1956, at Holiday Home, Lake Geneva, Wisconsin. The Diabetes Association furnishes a staff of resident physicians and dietitians trained in the care of diabetic children. Boys and girls ages eight to fourteen years are eligible. For details write The Chicago Diabetes Association, 3 South Wabash, Chicago 3.

* * *

The 1956 Industrial Health Conference will be held April 21-27, in Convention Hall, Philadelphia, Pennsylvania. From April 22-24 will be held the American Conference of Governmental Industrial Hygienists; on April 24-26, the American Association of Industrial Nurses; on April 24-26, Industrial Medical Association; April 24-26, American Association of Industrial Dentists; April 23-27, American Industrial Hygiene Association.

* * *

A regional meeting of the Southern Region of the American College of Gastroenterology will be held in New Orleans, La., on Sunday, April 8, 1956. The Scientific Sessions will be held in the auditorium of the Louisiana State University School of Medicine, commencing at 2:00 p.m.

Members of the medical profession are cordially invited to attend. A copy of the program may be obtained from the Secretary, American College of Gastroenterology, 33 West 60th Street, New York 23, N. Y.

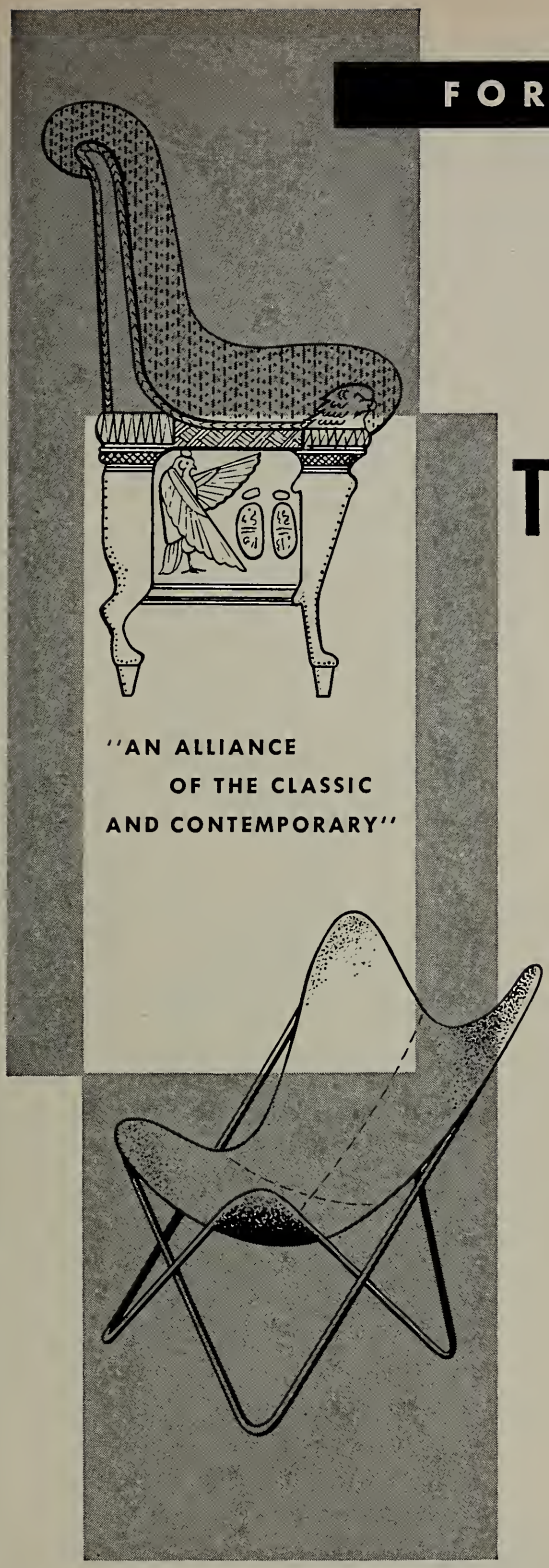
* * *

M. K. Newman, M.D., addressed the staff of the Detroit League for the Handicapped, January 7, 1956, on the subject, "Muscular Dystrophy." "Electromyography in Physical Medicine and Traumatic Diseases" was the title of his address given before the Detroit Academy for the Surgery of Trauma, on January 17, 1956.

* * *

The Ninth Annual Rural Health Conference made

(Continued on Page 346)



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THEOMINAL® R.S.

Now you can give your hypertension patients the compound therapeutic advantages of two successful hypotensive agents: Theominal (theobromine with Luminal®) and purified Rauwolfia serpentina alkaloids.

THEOMINAL R. S. *gives*
Better Control of Cardiovascular and Subjective Symptoms

Theominal R. S. offers both the vasodilator and myocardial stimulant actions of theobromine with Luminal and the moderate central hypotensive effect of Rauwolfia serpentina. Gentle sedation calms the patient and a feeling of "relaxed well-being" is established. With Theominal R. S. the therapeutic potency of each of the components is enhanced and the chance of a patient's sensitivity to any one drug is lessened.

Each Theominal R. S. tablet contains:

Theobromine	0.32 Gm. (5 grains)
Luminal	10 mg. (⅙ grain)
Purified extract of Rauwolfia serpentina alkaloids	**1.5 mg.**

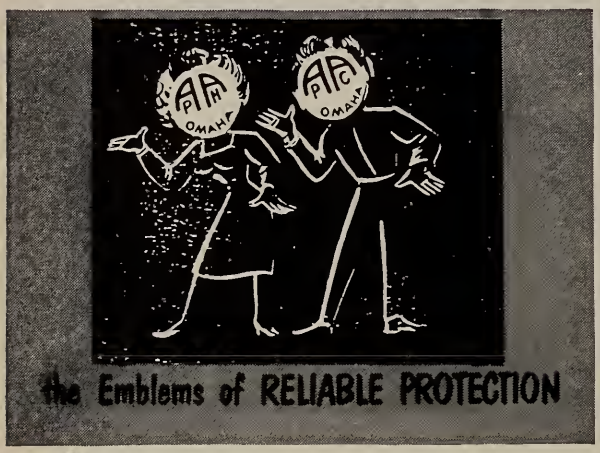
DOSE: 1 tablet two or three times daily.

SUPPLIED: bottles of 100 and 500 tablets.

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THEOMINAL AND LUMINAL (BRAND OF PHENOBARBITAL), TRADEMARKS REG. U.S. PAT. OFF.

WE CORDIALLY INVITE YOUR INQUIRY for application for membership which affords protection against loss of income from accident and sickness (accidental death, too) as well as benefits for hospital expenses for you and all your eligible dependents.



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ALL PREMIUMS COME FROM

PHYSICIANS SURGEONS DENTISTS

ALL BENEFITS GO TO

$4,500,000 ASSETS
$22,500,000 PAID FOR BENEFITS

PHYSICIANS CASUALTY AND HEALTH ASSOCIATIONS
OMAHA 2, NEBRASKA

(Continued from Page 344)

feasible by the financial assistance of the Michigan Foundation for Medical and Health Education, and sponsored by the Michigan Health Council, was held in Kalamazoo, January 19 and 20, 1956, at the Harris Hotel. Milton Grinnell of Lansing, editor of the *Michigan Farmer,* presided. The first forenoon was devoted to three speeches: Albert E. Heustis, M.D., "A Look into the Future—in Public Health"; L. Fernald Foster, M.D., Secretary of MSMS—"In Medical Care"; Lt. Governor Phillip A. Hart—"In Sociological Areas of Health." Chairman Otto Yntema, Western Michigan College, previewed the Deskside Conference, which ensued after lunch. Resource persons were: Heart Disease—John D. Littig, M.D., Kalamazoo; Cancer—R. C. Hildreth, M.D., Kalamazoo; Mental Health—C. M. Schrier, M.D., Kalamazoo State Hospital; New Drugs —Henry M. Swain, M.D., Department of Pharmacy, University of Michigan; Poliomyelitis—Thomas Francis, Jr., M.D., Ann Arbor, School of Public Health. The conferences continued, with a coffee break, until 4:00 p.m.

At the banquet in the evening, mimeographed copies of the morning speeches and the questions and answers of the Deskside Conferences were ready for anyone to take home. Awards were made and guests were introduced. At a central table were presidents of twenty-two of the sponsoring organizations constituting Michigan Health Council. The speaker of the evening was Austin Smith, M.D., Chicago, Editor of *The Journal of the American Medical Association.* He gave a very illuminating talk on "Your Future is Healthier."

Friday, January 20, was devoted to a second annual Community Health forum. S. E. Chapin, M.D., of Dearborn, talked on "Health Councils are Our Business." Otto Yntema, Kalamazoo, conference chairman, instituted the first "What's Your Opinion?" Everyone was invited to enter the discussion with questions and opinions. The second conference consisted of answers by the Resource people: O. Herbert Ellis, Detroit Tuberculosis and Health Society of Wayne County; S. E. Chapin, M.D., President, Health Council; Marjorie Karker, Lansing, Co-ordinator Women's Activities, Michigan Farm Bureau; Booker L. Masters, M.D., Freemont, MSMS Committee on Rural Health, and Warren F. Tryloff, Detroit, Field Secretary, MSMS.

* * *

The 150th Anniversary of the founding of the Medical Society of the County of New York will be celebrated in sesquicentennial events scheduled in April, 1956, according to Gerald D. Dorman, M.D., President of the Society.

New York County, the Island of Manhattan, has the largest local medical society in the nation with 7,000 members. The Society was founded in 1806 when 102 physicians assembled on the steps of City Hall and publicly proclaimed the Society of Physicians to exist. Its charter was then received from the State of New York. One of the forthcoming events of the sesqui-

(Continued on Page 348)

the only broad spectrum antibiotic preparation that...



1 provides the antimicrobial activity of tetracycline

Because it contains Steclin (Squibb Tetracycline), the well tolerated broad spectrum antibiotic, MYSTECLIN is an effective therapeutic agent for many common infections. Most pathogenic bacteria, as well as certain large viruses, certain Rickettsiae, and certain protozoans, are susceptible to Mysteclin.



2 protects the patient against monilial superinfection

Because it contains Mycostatin (Squibb Nystatin), the first safe antifungal antibiotic, MYSTECLIN acts to prevent monilial overgrowth frequently observed during broad spectrum antibiotic therapy. Manifestations of this overgrowth may include some of the diarrhea and anal pruritus associated with antibiotic therapy, as well as vaginal moniliasis and thrush. On occasion, serious and even fatal infections caused by monilia may occur.

Mysteclin

STECLIN-MYCOSTATIN
(Squibb Tetracycline-Nystatin)

Each MYSTECLIN Capsule contains 250 mg. Steclin (Squibb Tetracycline) Hydrochloride and 250,000 units Mycostatin (Squibb Nystatin).

Minimum adult dose: 1 capsule q.i.d. *Supply:* Bottles of 12 and 100.

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"MYSTECLIN", "STECLIN" AND "MYCOSTATIN"® ARE SQUIBB TRADEMARKS

for modern
control of
salt retention
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CUMERTILIN®
(Brand of Mercumatilin, Endo)
Tablets

- effective **oral** diuretic with no significant gastrointestinal irritation[1]
- Suitable for long-term maintenance therapy.
- eliminates need for injections in certain cases, lengthens interval between injections in others
- basically **different** in chemical structure, extending the therapeutic choice in organic mercurials

DOSAGE: 1 to 3 tablets daily as required.

SUPPLIED: As orange tablets, in bottles of 100 and 1000. Also available—

CUMERTILIN Sodium Injection, 1- and 2-cc. ampuls, in boxes of 12, 25, and 100; and 10-cc. vials, individually and in boxes of 10 and 100.

1. Pollock, B. E., and Pruitt, F. W.: Am. J. M. Sc., 226:172, 1953.

THE G. A. INGRAM COMPANY
4444 Woodward Avenue, Detroit 1, Mich.

(Continued from Page 346)

centennial will be to re-enact this scene and rededicate the Society to the service of the citizens of New York.

Plans for the celebration include historical exhibits, programs in the scores of hospitals of the city on the newest clinical applications of medicine, open house and special exhibits in the five medical schools of New York, television and radio programs for the public on "New Horizons in Medicine" and special cancellation postmarks for all letters mailed in Manhattan during the event. A special anniversary seal has been created for use on all letters mailed by physicians and as a motor vehicle sticker on the cars of physicians.

William B. Rawls, M.D., a past president of the Society, is general chairman of the anniversary event which will climax at a formal dinner for more than 1,000 persons at the Waldorf-Astoria Hotel on the evening of April 5, 1956.

* * *

All Army physicians and dentists in the grade of first lieutenant who have at least one year of professional experience will be advanced to the temporary grade of captain within the next two months has been announced by Major General Silas B. Hays, The Army Surgeon General.

The advancements, which will affect an estimated 1,100 medical and 500 dental first lieutenants, are the result of a revised personnel policy which makes doctors and dentists eligible for the grade of captain after one year or more of professional experience.

The new policy will not impede the promotion of nonmedical officers, because the Department of Defense has authorized the advancements to be made outside of the Army's regular quota of captains.

Starting in April, young doctors and dentists entering the Army will receive initial grades of captain if they have a year or more of professional experience. Thus, with the exception of military interns—who serve as first lieutenants—the lowest grade in the Army Medical Corps will be that of Captain.

The new policy recognizes that doctors must have at least nine years of training beyond the high school level in contrast to the four years of formal education beyond high school required of most other officers at the time they are initially commissioned.

* * *

The Trudeau School of Tuberculosis will present its forty-first Annual Session June 4-29, 1956. The course covers all aspects of pulmonary tuberculosis and phases of other chronic chest diseases.

Tuition fee is $100 payable on or before June 4. A few scholarships are available for those who can qualify. Communications should be addressed to Secretary, Trudeau School, 7 Church Street, Saranac Lake, New York.

* * *

L. Fernald Foster, M.D., Bay City, MSMS Secretary, spoke on "Facts on our 1956 Michigan Medical Service" at the February 17 meeting of the Muskegon County Medical Society.

(Continued on Page 350)

Say you saw it in the Journal of the Michigan State Medical Society

Meat...

and the Value of Fat in Nutrition

Authorities in the field of nutrition no longer consider fat as an optional component of the diet. Evidence from the laboratory and bedside indicates that fat in small amounts may be looked upon as an obligatory constituent of a health-promoting diet.[1]

The far-reaching value of fat in nutrition has been amply demonstrated in laboratory animals in its pronounced effect on growth, on pregnancy and lactation, on nitrogen-sparing action, on work capacity, on time of sexual maturity, on the period of survival during fasting, and on ability to combat external stresses.[1]

Young animals fed a fat-free diet not only fail to grow normally, but develop hair and skin changes characteristic of "essential" fatty acid deficiency.[2] Fatty acids other than the "essential" fatty acids also appear to be necessary for optimal health. Animals fed "essential" fatty acids but no others do not grow optimally.

The value of fat in human nutrition was emphasized in a recent study[2] comprising 200 patients incapable of receiving adequate nourishment. For periods of 1 to 30 days, these patients were given supplementary fat alimentation by vein in the form of fat emulsion containing "essential" as well as other fatty acids. The result was typically a marked increase in weight and more positive nitrogen and potassium balances.

Meat, recognized for its high content of biologically valuable protein, B vitamins, and essential minerals, provides, in addition, substantial amounts of nutritionally important fat.

1. Deuel, H. J., Jr.: Newer Concepts of the Role of Fats and of the Essential Fatty Acids in the Diet, Food Res. *20*:81 (Jan.-Feb.) 1955.

2. Meng, H. C.: Preparation, Utilization, and Importance of Neutral Fat Emulsion in Intravenous Alimentation, in Najjar, V. A.: Fat Metabolism, Baltimore, The Johns Hopkins Press, 1954, pp. 69-92.

The nutritional statements in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

American Meat Institute
Main Office, Chicago . . . Members Throughout the United States

Say you saw it in the Journal of the Michigan State Medical Society

'ANTEPAR'®*



for "This Wormy World"

PINWORMS

ROUNDWORMS

*SYRUP OF 'ANTEPAR' Citrate brand Piperazine Citrate

Bottles of 4 fluid ounces, 1 pint and 1 gallon.

*TABLETS OF 'ANTEPAR' Citrate brand Piperazine Citrate

250 mg. or 500 mg., Scored

Bottles of 100.

Pads of directions sheets for patients available on request.

BURROUGHS WELLCOME & CO. (U. S. A.) INC.
Tuckahoe, New York

NEWS MEDICAL

(Continued from Page 348)

Thomas Francis, Jr., M.D., Ann Arbor, evaluator of the Salk polio vaccine, recently stated that the fight against polio may lead to pills. A chemical approach to the problem would attack the poliomyelitis virus directly, whereas the Salk vaccine relies on antibodies built up in the blood as protection against the disease, Dr. Francis said.

* * *



Fred Drolett, M.D., Lansing, was honored by members of the Ingham County Medical Society on January 21, 1956. President John M. Wellman, M.D., Lansing, presented Dr. Drolett with the ICMS Annual Service Citation and called Doctor Drolett "a sound general practitioner who continues to be not indifferent, not careless, not absorbed in other pursuits; a man whose life is devoted to the care of sick people." Doctor Drolett has been practicing medicine for forty-nine years. Two sons, Lawrence and Donald, also practice medicine in Lansing.

Congratulations, Doctor Drolett!

* * *

W. B. Cooksey, M.D., Detroit, was recently appointed a member of the Detroit Board of Education.

Congratulations, Doctor Cooksey!

* * *

Edmond L. Cooper, M.D., Detroit, recently was elected Secretary-Treasurer of the American Orthoptic Council. Another Michigan ophthalmologist serving on the Council is John W. Henderson, M.D., Ann Arbor.

Doctor Cooper is the author of a recent article entitled "Muscle Surgery and Orthoptics" which was published in the *American Journal of Ophthalmology.*

* * *

E. F. Sladek, M.D., Traverse City, presented a talk on "Anal Fissure and Associated Pathologic Conditions in Infancy and Early Childhood" at the June, 1955, meeting of the American Proctologic Society in New York City. His paper was printed in the *American Journal of Surgery,* Volume 90.

* * *

The 1956 Industrial Health Conference is scheduled for Convention Hall, Philadelphia, April 21-27, 1956. O. T. Mallery, Jr., M.D., Director, University of Michigan Institute of Industrial Health, Ann Arbor, is scheduled to be on the program April 26.

For information and copy of the program, write Industrial Health Conference, 28 E. Jackson Blvd., Chicago.

* * *

A Conference on Anesthesiology is scheduled for April 26-27-28, to be held under the auspices of Wayne University College of Medicine and the Detroit Receiving Hospital.

Registration must be made in advance—the fee is $4.00. For information write F. E. Greifenstein, M.D., Wayne University Board of Education, 1401 Rivard St., Detroit 7.

Say you saw it in the Journal of the Michigan State Medical Society

WAYNE UNIVERSITY COLLEGE OF MEDICINE ALUMNI ASSOCIATION

Clinic Days and Alumni Reunion
Tuesday, May 8, 1956
Auditorium—Medical School

Registration—8:00 A.M.
Morning Session—9:00 to 10:05 A.M.
Dean Gordon Scott
Introductory Remarks
Gordon B. Myers, M.D.
"Treatment of Refractory Cardiac Failure"
Charles G. Johnston, M.D.
"The Problem of Intestinal Obstruction"
Ward Rounds—10:15 A.M. to 12:00 M.

Receiving Hospital

Medicine—Groups of six each
Surgery—Groups of six each
Gynecology—Groups of six each
Pediatrics—One group of six

Lunch—12:15 P.M.

Medical School

Afternoon Clinics—1:30 to 3:30 P.M.

Kresge Auditorium

MEDICINE—Muir Clapper, M.D., *Moderator*
R. B. Leach, M.D.
"The Clinical Use of Present-day Insulins"
Yoshikazu Morita, M.D.
Ganglionic Blockers in the Treatment of Hypertension"
George O. Clifford, M.D.
"Treatment of Anemia"
Alfred J. Bollet, M.D.
"Value of Hormone Therapy in the Rheumatic Diseases"
Afternoon Clinics—1:30 to 3:30 P.M.

Farwell Annex, 242

SURGERY—Duncan Cameron, M.D., *Moderator*
Paul K. Truba, M.D.
"Management of Colles Fractures"
A. Jackson Day, M.D.
"The Spiral Oblique Fracture of the Tibia"
Herbert E. Pedersen, M.D.
"Pathological Fractures"
Don W. McLean, M.D.
"Diverticulitis of the Colon"
Gaylord S. Bates, M.D.
"Carcinoma of the Colon"
Robert T. Crowley, M.D.
"Neoplasms of the Chest"
Paul O'Rourke, M.D.
"Injuries to the Chest"
Warren O. Nickel, M.D.
"Fluid Balance Management in Burns"
George L. Walker, M.D.
"Local Treatment of Burns"
Afternoon Clinics—1:30 to 3:30 P.M.

Neuropsychiatric Institute

GYNECOLOGY—C. S. Stevenson, M.D., *Moderator*
H. L. Fachnie, M.D.
"Prevention of Pre-eclampsia"
C. S. Stevenson, M.D.
"Detection and Treatment of Cervical and Uterine Carcinoma"
Ralph F. Sortor, M.D.
"Obstetrical Analgesia and Anesthesia"
C. E. Darling, M.D.
"Management of Leukorrhea and Vulvar Pruritus"
Afternoon Clinic—3:40 to 4:45 p.m.

Farwell Annex, 242

O. A. Brines, M.D., *Moderator*
Muir Clapper, M.D., Alfred M. Large, M.D., C. S. Stevenson, M.D., Robert M. Whitrock, M.D.
"Acute Conditions of the Abdomen"

Results With

'ANTEPAR'®*

against PINWORMS

In clinical trials, over 80% of cases have been cleared of the infection by one course of treatment with 'Antepar.'

Bumbalo, T. S., Gustina, F. J., and Oleksiak, R. E.: J. Pediat. 44:386, 1954.

White, R. H. R., and Standen, O. D.: Brit. M. J. 2:755, 1953.

against ROUNDWORMS

"Ninety per cent of the children passed all of their ascarides . . ."

Brown, H. W.: J. Pediat. 45:419, 1954.

***SYRUP OF 'ANTEPAR'** Citrate brand Piperazine Citrate

Bottles of 4 fluid ounces, 1 pint and 1 gallon.

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Pads of directions sheets for patients available on request.

BURROUGHS WELLCOME & CO. (U.S.A.) INC.
Tuckahoe, New York

Wednesday, May 9, 1956

Hotel Fort Shelby

Registration—8:30 a.m., Main Floor Lobby

Morning Session—9:00 to 11:30 a.m.

Annual Alumni Business Meeting, Ballroom
A. Carlton Ernstene, M.D., Cleveland, Ohio
"The Treatment of Coronary Heart Disease"
E. Perry McCullagh, M.D., Cleveland, Ohio
"The Choice of Treatment of Hypothyroidism"
J. S. Gottlieb, M.D., Detroit, Michigan
"Modern Methods in Psychiatric Therapy"

Subscription Luncheon—12:30 p.m.

Afternoon Session—2:00 to 4:00 p.m.

Donald C. Collins, M.D., Hollywood, California
"Technique of Preparing Medical Articles for Publication"
Chevalier L. Jackson, M.D., Philadelphia, Pennsylvania
"Diagnosis and Treatment of Carcinoma of the Larynx, Bronchi and Esophagus"
Orvar Swenson, M.D., Boston, Massachusetts
"Problems in Pediatric Surgery"

Reception—6:15 p.m.

Hotel Fort Shelby

Annual Alumni Reunion Banquet—7:00 p.m.

Hotel Fort Shelby

The American Association of Blood Banks will hold its 9th Annual Meeting on September 3-4-5, 1956, Somerset Hotel, Boston (not in Cincinnati in November as previously announced). For information, write Miss Marjorie Saunders, Secretary, 725 Doctors Building, 3707 Gaston Avenue, Dallas, Texas.

* * *

James Milton Robb, M.D., Detroit, will be the Moderator of a Symposium on Otolaryngologic Therapy at the American Medical Association convention in Chicago, June 12-14.

* * *

Harold F. Schuknecht, M.D., Detroit, will discuss the subject of "Carcinoma of the Nose and Paranasal Sinuses" at this AMA Session.

Bernard Weston, M.D., Detroit, also will present a paper entitled "Introduction of a New Instrument for Removing a Post Nasal Pack" at this convention.

Another Michigan speaker at this meeting is **Bruce Proctor, M.D.,** Detroit, who will discuss the subject of "Traumatic Deafness."

* * *

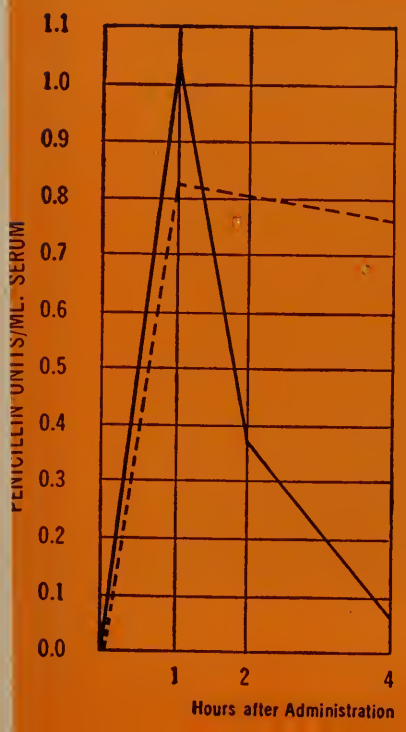
The Children's Bureau announced a special grant of $55,000 to help the Michigan Crippled Children Commission treat child amputees from other states.

"Michigan is believed to have more experience in treating children with congenital or accidental amputation than any other state," the Bureau announcement stated.

The MCCC is authorized to offer to treat children

(Continued on Page 354)

Now! Palatable Oral Suspension Gives Higher, Faster Blood Levels than Twice the Dose of Injected Procaine Penicillin



PEN·VEE·Suspension, 300,000 units

Procaine Penicillin G, 600,000 units (one injection)

This ready-mixed, stable, and pleasant flavored suspension is supplied as follows: PEN-VEE·*Suspension*, 300,000 units per 5-cc. teaspoonful, bottles of 2 fl. oz. Also available PEN·VEE·*Oral* Tablets, 200,000 units, scored bottles of 36; 500,000 units, scored, bottles of 1

PEN·VEE*·Suspension

Benzathine Penicillin V Oral Suspension

ORAL PENICILLIN
WITH
INJECTION PERFORMANCE

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*Tra

For **TRIPLE SULFA**

THERAPY

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GROUPS



...SAFE—PLEASANT TO TAKE
...ACCURATE DOSAGE
...BUFFERED and VISCOLIZED
...WILL NOT SEPARATE

BUFFONAMIDE

TRIPLE SULFA SUSPENSION

TASTY, CHERRY FLAVOR and COLOR—ECONOMICAL!

There is no safer or more effective sulfonamide available! Extensive clinical trials show that triple sulfas (BUFFONAMIDE) have outstanding therapeutic efficiency among sulfa drugs.

Each Teaspoonful (5 cc.) Provides:	
Sulfadiazine	0.166 gm.
Sulfamerazine	0.166 gm.
Sulfacetamide	0.166 gm.
BUFFERED with Sodium Citrate	0.5 gm.

At Pharmacies Everywhere!

Handy 2 oz. Dispenser Pints or Gallons

BUFFONAMIDE ASSURES:

- Widest possible antibacterial spectrum
- Highest blood level... Safely and quickly
- Maximum potency in smallest dose
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IF YOUR PATIENT WANTS TO DRINK THAT'S HIS BUSINESS IF HE WANTS TO QUIT that's our BUSINESS

BRIGHTON HOSPITAL, now in operation for over 2 years, wishes to thank the physicians of Michigan and Ontario for the good reception and the confidence given to us.

We know that today's physician recognizes the many-sided nature of the disease—Alcoholism. Beyond the physical, which requires expert treatment in itself, the alcoholic's physician is plagued, we know, with the equally vital aspects, which make demands on his time and attention, of the emotional, spiritual and mental sickness he notes in his patient.

We believe that Brighton Hospital offers the answer. Physicians can now send their alcoholic patients to Brighton with the certain assurance that they will find expert medical and nursing attention AND that, if they so desire, patients will be thoroughly indoctrinated with the program of Alcoholics Anonymous.

BRIGHTON HOSPITAL is NOT interested in the patient who merely wishes to be dried out in order to resume drinking. We ARE interested in those patients who really, fervently, seek complete rehabilitation and a way of life FREED from alcohol.

BRIGHTON HOSPITAL is owned and operated by MICHIGAN ALCOHOLIC REHABILITATION FOUNDATION, a non-profit organization devoted to the best possible hospitalization of the alcoholic who seeks to stop drinking.

DOCTORS, we are here to serve you. We are here to serve your patients.

BRIGHTON HOSPITAL

12851 East Grand River Avenue Brighton, Michigan Phone: Brighton Academy 7-1211

(Continued from Page 352)

from any part of the country where adequate state or local treatment is not available. The fund will pay expenses, if other means are not available.

Under the project, any physician or clinic may recommend to his own state's crippled children's agency that a child patient be treated in Michigan if the state of origin does not have adequate or suitable treatment available. If the state agency determines the child is eligible for treatment under the state program, the application would be sent to Michigan for decision.

The $55,000 grant is for the period ending July 1.

* * *

The Children's Psychiatric Unit of the University of Michigan was dedicated on February 1, 1956. Congratulations, University of Michigan, on this fine addition to a great medical school!

GYNECOLOGIC CYTOLOGY SERVICE

Interpretation of Cervico-Vaginal, Etc. (Papanicolaou) Smears for the Diagnosis of Carcinoma

Kits (Slides, Spatulas, Fixative and Mailing Containers) and Instructions for Taking and Mailing Smears furnished on request

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GYNE-CYTOLOGY LABORATORY
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MEDICAL TELEVISION SHOWS

Produced by Michigan Health Council

Date 1956	*Station*	*Subject*	*Guests*
Jan. 1	WJBK-TV, Detroit	Drop in the Bucket	A Film
Jan. 5	*WKAR-TV, East Lansing*	9th Annual Michigan Rural Health Conference	Milon Grinnell, East Lansing
Jan. 8	WJBK-TV, Detroit	9th Annual Michigan Rural Health Conference	Sidney E. Chapin, M.D., Dearborn
Jan. 15	WJBK-TV, Detroit	The Medical Examiner System	Edward S. Zawadzki, M.D., Detroit
Jan. 22	WJBK-TV, Detroit	16th Annual Congress on Industrial Health	A. J. Vorwald, M.D., Detroit E. A. Irvin, M.D., Detroit
Jan. 26	WKAR-TV, East Lansing	Mothers' March on Polio	Mrs. Mona Cutler, Lansing
Jan. 29	WJBK-TV, Detroit	Inside Story	A Film

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2:40 FREDERICK A. COLLER PANEL: "ACUTE CONDITIONS OF THE ABDOMEN."

Dr. Robert Berry, Professor of Surgery, University Hospital.
Dr. Thurston Thieme, Surgeon, St. Joseph Hospital.
Dr. Clarence Crook, Surgeon, St. Joseph Hospital.
Dr. Lyndon Lee, Jr., Director of Surgery, Wayne County General Hospital.

3:20 JAMES L. WILSON PANEL: "PEDIATRIC NEUROLOGY."

Dr. Russell DeJong, Chief, Neurology, University Hospital.
Dr. William Noshay, Chief, Neurology, Henry Ford Hospital.
Dr. Harry Towsley, Professor of Pediatrics, University Hospital.
Dr. Aaron Edwards, Pediatrician, St. Joseph Hospital.

4:00 MARK MARSHALL PANEL: "THYROID GLAND, NORMAL FUNCTION AND PATHOLOGY."

Dr. Darrell Campbell, Surgeon, St. Joseph Hospital.
Dr. S. E. Gould, Pathologist-in-Chief, Wayne County General Hospital.
Dr. B. C. Payne, Internist, St. Joseph Hospital.
Dr. W. H. Beierwaltes, Internist-Isotopist, University Hospital.
Dr. T. P. Eberhard, Radiologist-Isotopist, St. Joseph Hospital.

4:40 CONFERRING OF DISTINGUISHED MEDICAL CITIZENSHIP AWARD.

Dr. John M. Sheldon, Director, Department of Post-Graduate Medicine, University of Michigan, will present this award to Dr. Howard H. Cummings, Professor Emeritus, Post-Graduate Medical Education.

5:00 INTERMISSION.

5:45 COCKTAILS, Allenel Hotel.

7:00 DINNER AND MEETING OF THE WASHTENAW COUNTY MEDICAL SOCIETY, CANCER PROGRAM. Allenel Hotel.

EVENING FOR THE LADIES.

For further information write

Dr. Jas. E. Bailey, Secretary, 292 E. Chicago, Coldwater, Michigan

It's an "OPEN AND SHUT CASE" for **sandura**



ILLUSTRATED — Welch Allyn Otoscope - Ophthalmoscope Set No. 983, complete with Sandura Case.

The new WELCH ALLYN instrument case that offers you far greater

- **DURABILITY**
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- **BEAUTY**

The Sandura Case is molded in reinforced material to stand great shock or abrasion, with tarnish-proof soft rubber lining which protects instruments from shock. The entire case can be washed or sterilized with alcohol.

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"Neohydrin... offers the striking advantage of a high degree of therapeutic effectiveness upon oral administration."*

*Krantz, J. C., Jr., and Carr, C. J.: The Pharmacologic Principles of Medical Practice, ed. 3, Baltimore, The Williams and Wilkins Company, 1954, p. 998.

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Offers to the elderly and chronically ill

Peace and quiet. Freedom of a large and richly furnished home and acres of lawns and wooded rolling grounds, scientifically prepared tasty meals, congenial companionship. A real

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Communications

Dear Doctor Haughey:

As you know, it is not practical to make an exact comparison between Social Security benefits and a comparable life insurance program, since no insurance contracts written is exactly parallel to Social Security benefits. A general comparison, however, is sufficient to establish a perspective and to make certain general observations.

First, take a self-employed business man, aged thirty, who has a wife the same age (to simplify our calculations) and twin boys, aged three (again for purposes of simplification). This man earns $4,200.00 a year, the maximum amount under the Social Security percentage system in calculating his contribution.

If this man dies, Social Security will pay his widow and two sons $200.00 a month for fifteen years, when the boys reach the age of eighteen. Then all income stops until the widow reaches age sixty-five, at which time she is eligible for an income of $81.40 per month for the rest of her life. A lump sum benefit not to exceed $255.00 would also be paid at the time of the man's death.

If the man lives, he is eligible at age sixty-five to receive $162.80 per month as long as both he and his wife are alive. If she dies, his income will be reduced to $108.50 per month for life. If he dies, his widow would receive $81.40 for life.

The cost of this protection under the current law, which required 3 per cent of his $4,200 on a graduated scale which eventually goes up to 6 per cent in 1975 and thereafter, will total by age sixty-five for this self-employed businessman—the sum of $8,442.00.

This means that if both retire at sixty-five and receive $162.80 per month retirement income, in less than five years the businessman has recovered his cost of protection.

Now, take the case of a physician, aged thirty, with a wife of the same age and twin boys aged three. We cannot construct an exact equivalent of the Social Security situation without making actuarial computations on a policy that no life insurance company has for sale. We can, however, approximate the situation.

This doctor buys a $20,000.00 policy on the Life Paid Up at sixty-five plan, with a family income term rider that will pay $200.00 a month, in the event of his death, for fifteen years, at which time his sons will be eighteen. This same policy will pay him $158.44 a month for life at age sixty-five, and will continue these payments for ten years from date of retirement whether he lives or not.

This policy will cost the doctor a total of $19,409.20 between the ages of thirty and sixty-five. The cash value and estimated dividends on one company would by that time approximate $26,232.20. This means that he has had the protection of $20,000, plus a family income of $200 a month and at retirement may receive his cost back plus a profit of $6,823.20. He may then turn around and convert this cash to a life income of $158.44 per month as described above or withdraw the $26,232.40 in cash.

If both the doctor and his wife are alive at sixty-five and elect to receive a retirement income of $158.44 a month for his lifetime, it would take over nine years to recover the cost of the plan. On the other hand, in the case of Social Security, if both the businessman and his wife die at sixty-five, all the cost of the plan is lost. This would be true if they died before sixty-five as well. In the case of the doctor and his wife, the benefits would go to the final beneficiary.

One other thing. If the businessman under Social

(Continued on Page 360)

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(Continued from Page 358)

Security does not retire at sixty-five, he will not receive the retirement benefits. On the other hand, the physician will receive the retirement benefits of the insurance plan, whether he retires or not.

I hope this has been some help in drawing some general conclusions regarding the Social Security question in its purely mathematical aspects.

Sincerely,

FRANK B. EGAN

Licensed Insurance Counselor

January 31, 1956

Dear Wilfrid:

As nine out of ten (or more) Michigan physicians are apparently unaware that *annual* registration of all physicians in Michigan is a legal requirement of the present Medical Practice Act, I am suggesting that this provision be called to their attention through the columns of the JOURNAL.

Under this section (P.A. 338.60, Compiled Laws of 1948) the secretary of the Board of Registration must "annually, on or before the first day of January," be furnished with "the name, age and sex of each (physician), and the length of time each has been engaged in practice." The Act further provides that the above information must be collected by the "assessing officer at the time of making the annual assessment," turned over to the County Clerk, certified and transmitted by him to the secretary of the Board.

This method of collection and transmission of information was geared to conditions of the 19th century but by our modern standards it is both cumbersome and undependable.

The amendment to Section 10, Act 237 of 1899 which I have prepared eliminates two steps (the Tax Assessor and the County Clerk) from the present three-step registration process. It provides for transmission of information by the individual physician direct to the Board secretary. I believe that no one, who will take the trouble to study the matter, can conceivably champion the old three-step registration process in preference to the new simplified method.

The proposed $5.00 registration fee is nominal—the annual registration fee for optometrists is $15.00. While I can see some merit to the provision of the Osteopathic and similar Acts which provide for annual refresher courses as a prerequisite to issuance of the annual registration certificate, I am not including such provision in this amendment.

You and I have seen a lot of changes in our lifetime and, I am sure, you will agree that a statute that originally went on the books in 1883, almost three-quarters of a century ago, is ripe for some modernization.

Best regards,

FRED W. ZINN

House of Representatives

Lansing, Michigan

January 25, 1956

WHO OWNS AMERICA?

A tourist in Europe met a Britisher. The stranger remarked proudly, "I am a British subject. I suppose you are a subject of the United States?" "Subject? Not on your life. *I own* a part of the United States. I'm no subject."

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*Lawrence, W. E.; Kahn, S. S., and Riser, A. B.: South. M. J. 47:105, 1954.

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

SEXUAL HYGIENE AND PATHOLOGY. A Manual for the Physician. By John F. Oliven, M.D., Psychiatrist to Vanderbilt Clinic, Columbia-Presbyterian Medical Center, New York; former senior Psychiatrist, Bellevue Hospital and Mental Hygiene Clinic; Instructor in Psychiatry, College of Physicians and Surgeons, Columbia University. Philadelphia and Montreal: J. B. Lippincott Company, 1955. Price, $10.00.

BEDSIDE DIAGNOSIS. By Charles Seward, M.D., F.R.C.P. (Edin.), Physician, Royal Devon and Exeter Hospital; Consulting Physician, Princess Elizabeth Orthopaedic Hospital, West of England Eye Infirmary and the Ministry of Pensions; Honeyman Gillespie Lecturer; Late Advisor in Medicine to Eastern Command, India; Deputy President, Review Medical Board, India. With a foreword by Sir Henry Cohen, M.D., D.Sc., L.L.D., F.R.C.P., F.F.R., Professor of Medicine, University of Liverpool. Third Edition. Edinburgh and London: E. & S. Livingstone, Ltd., 1955. Price, $4.00.

DOCTOR AND PATIENT. By Desmond O'Neill, M.D., M.R.C.P. (Lond.), D.P.M. (Eng.), Physician, Department of Psychiatry, St. Mary's Hospital, London; Psychiatrist, Chelsea Hospital for Women; Clinical Assistant, Department of Psychological Medicine, University College Hospital. Philadelphia and Montreal: J. B. Lippincott Company. Price, $5.00.

PROCEEDINGS. Third Medical Conference of Muscular Dystrophy Associations of America, Inc., New York, N. Y., October 8 and 9, 1954.

MODERN DRUG ENCYCLOPEDIA AND THERAPEUTIC INDEX. Edited by Marion E. Howard, M.D., F.A.C.P. Associate Clinical Professor, Department of Internal Medicine, Yale University School of Medicine; Associate Physician, Grace-New Haven Community Hospital and the Department of University Health, Yale University, New Haven, Conn. Sixth edition. New York: Drug Publications, Inc. (49 West 45th Street), 1955.

CORRELATIVE NEUROSURGERY. By Edgar A. Kahn, Robert C. Bassett, Richard C. Schneider, Elizabeth Caroline Crosby. Contributors: Basu K. Bagchi, Jere M. Bauer, John M. Converse, William T. Correa, Russell N. DeJong, Robert G. Farris, David G. Freeman, John F. Holt, Tryphena Humphrey, Henry R. Pantek, Carl F. List. With a foreword by Kenneth G. McKenzie, M.B., Toronto, F.R.C.S.(C) Consulting Senior Surgeon to the Toronto General Hospital and recently in charge of the Division of Neurosurgery in the Toronto General Hospital. Springfield, Illinois: Charles C Thomas, 1955. Price, $19.50.

The neurosurgeons who participated in the writing of this text were all trained by Dr. Max M. Peet who died suddenly on March 25, 1949. The teaching of Dr. Peet is evident as one reads the descriptions of surgical

(Continued on Page 364)

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Esophageal Surgery, one week, June 11
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(Continued from Page 362)

procedures. Almost all phases of neurosurgery are covered, in children as well as adults. The source material comes from the practical experiences of the Neurosurgical Clinic of the University of Michigan Medical School.

Dr. Elizabeth Crosby and the neurosurgical staff, working together, have correlated neuroanatomy and neurosurgery. The neuroanatomical diagrams, drawn especially for this text, do not try to show too much. They are simple but illustrative and helpful to the reader.

There are nonsurgical chapters on x-ray, electroencephalography, aphasia, endocrinology and radioactive isotopes, all done by experts in their fields.

This text, so well conceived and written, will find a welcome niche in the library of not only the neurosurgeon but also the practitioner, the medical student and the surgical resident.

J.W.H.

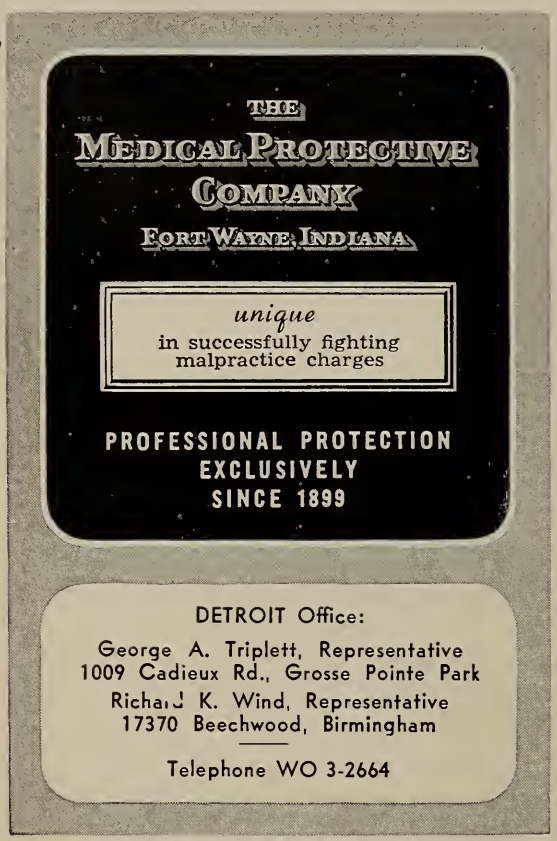
PRESENT-DAY PSYCHOLOGY. An Original Survey of Departments, Branches, Methods, and Phases, including Clinical and Dynamic Psychology. Edited by A. A. Roback, with the collaboration of forty experts in the various fields. New York: Philosophical Library, 1955. Price, $12.00.

The preparation of a comprehensive survey of psychology, or any similar subject, in a single volume undoubtedly presents many difficulties. With contributions from so many sources, each one an expert in his field, there will be complications in style, some repetition and some lack of uniformity. In overcoming these initial problems, the editor has achieved a measure of success when the book goes to the publishers.

A review of the table of contents and of the titles of the forty papers included would reveal certain other problems. Of these, the most prominent is the apparent boundless extent of the subject. Not only is this a "psychology" of any subject involving human endeavor, but there is a "psychology" of borderlands as well. Without further comment, the editor's intent to include "everything which is under investigation and of psychological import" seems to have been fulfilled.

As one would expect, some of the individual contributions are excellent reviews of the subject chosen. Among the remainder, some have suffered from limitation of space, and others are much too wordy. On the whole, the papers are interesting and should provide the sort of symposium intended by the editor.

F.O.M.



MICHIGAN FEDERATED UNION MEDICAL PLAN

(Continued from Page 319)

Compliance with the letter of the law might be difficult. This threat is indication, however, of coming events. If any of our members still believe "socialized medicine" is a dead issue—just look around this peninsula. The socializers, the do-gooders are still in govenment—protected by Truman's inclusion into Civil Service. They are still making policy at high level.

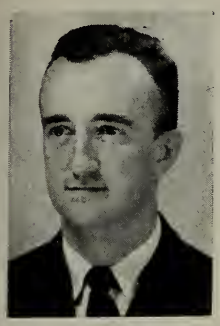
The "high costs" now being used as stimulus to action by unnamed Union leaders were directly caused by labor wage increases. Shorter hours, more employes, and demands for more pay caused seven-eighths of the advance in the last five years. Who squawked? Had hospital costs gone up as much as labor costs, who knows where they would have ended? Hospital administrators are not yet paying nearly as much as has been granted to millions of workers recently.

The new Union Medical Plan!! Do you see a hidden step towards Ewing's national compulsory health plan? Labor constantly demands more complete coverage, home and office and hospital, and the best possible care—but reneges on paying its cost. All this is promised in their new plan. If they fail, they will demand that the government take over!

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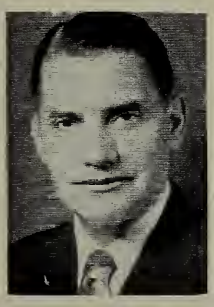
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Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 14, Minnesota.

Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, $6.00; single copies, 60 cents. Additional postage; Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year.

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1. Howell, T.H., et al.: Practitioner. *173*:172 (Aug.) 1954.

*T.M. Reg. U.S. Pat. Off. for chlorpromazine, S.K.F.

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Michigan Week is a "grass roots" program. It extends from the Governor down to the first grader. Its objective is to awaken our people to the past, present and challenging future of our great state for the purpose of building an *ever greater* Michigan.

Its success in sparking local activity is evident in the many meetings, events, celebrations and gatherings is every corner of the state. Local church, school, labor, business, social and cultural organizations co-operate to make it a success.

In all the co-operating groups there is evident a renewed spirit of desire to tell about Michigan products and services, about Michigan places and people, about Michigan's abundance of resources and facilities.

It's a spirit that naturally attracts the attention of those outside Michigan. Anyone likes to see, to take part in, and in a sense to become part of a place that helps make its people prosperous, happy and eager for the challenge of tomorrow.

This spirit affects every doctor of medicine practicing in Michigan. It makes a healthier environment and better facilities with which to practice and a better community in which to live and prosper.

You can play a part.

The fact that you practice in Michigan constitutes a contribution to the prosperity of our state. It is to people like you that the state and community also look for support of forward-looking civic ventures. That is why you are being invited to contribute to the Michigan Week Fund.

Checks may be made payable to Greater Michigan Inc. and sent to Fred Marin, President Bank of Lansing, Lansing, Michigan. Mr. Marin is treasurer of Greater Michigan Inc.

MICHIGAN ASSOCIATION OF BLOOD BANKS

The Michigan Association of Blood Banks has recently been formed, with the purpose of exchanging ideas and disseminating information relating to Blood Banking and its methodology by means of education, publicity and research and to plan for and foster co-operation between the blood banks in the state of Michigan in times of disaster. It will also function as a clearing house on questions relating to training personnel common to such institutions. Through the Blood Bank Association, it is hoped to keep the various members aware of and encourage high standards of service and to extend similar services through the state where these are needed. The member banks will also be encouraged to co-operate in the North Central Clearing House in a program which is attempting to unite the entire United States through the various District Clearing Houses.

Only through an active state Blood Bank Association, can the above purposes be carried out. Certainly, there has been a need in the state of Michigan for such an organization. In order to function properly, the Association must have the support of the hospital and community blood banks throughout the state of Michigan.

Letters with application blanks will be sent to all hospitals that are members of the Plasma Salvage Program of the Michigan Department of Health. It is hoped that the organization may be started with the co-operation of these blood banks as a nucleus.

The officers of the Association are: Rosser L. Mainwaring, M.D., President; Elmer R. Jennings, M.D., Vice President; and J. A. Kaspar, M.D., Secretary. Any inquiries can be forwarded to the officers at the address of the Secretary: Michigan Association of Blood Banks, c/o J. A. Kasper, M.D., Secretary, 468 Cadieux Road, Grosse Pointe 3, Michigan.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of February 16, 1956

- **Treasurer's Annual Report** was presented by William A. Hyland, M.D., Grand Rapids, and approved.
- **Meeting with Veterans Administration officials** (Director H. V. Higley and Medical Director W. S. Middleton, M.D.) to discuss continuation of "home town medical care program" was authorized.
- **Rheumatic Fever Co-ordinator Leon DeVel, M.D.** sought advice on expansion of the rheumatic fever program in Michigan. The Executive Committee of The Council felt the present Michigan Rheumatic Fever Control Program of postgraduate education, research, public information and public service should be improved, but that more ways to spend more money should not be sought at this time.
- **Committee Reports**—The following were given consideration: (a) Special Committee on Electronic Equipment for MSMS Executive Office,

(Continued on Page 376)

All the benefits of prednisone and prednisolone plus positive antacid action to minimize gastric distress



Multiple Compressed Tablets of 'Co-Deltra' and 'Co-Hydeltra' are designed to help the physician cope with the problem of gastric distress which might otherwise become an obstacle to therapy with the newer steroids prednisone and prednisolone. Each Multiple Compressed Tablet is specifically formulated as a "tablet within a tablet" to provide stability and to release in sequence antacid and anti-inflammatory components.

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'Co-Deltra'

Prednisone Buffered

Supplied: Multiple Compressed Tablets of 'Co-Deltra' and 'Co-Hydeltra', each containing 5 mg. prednisone or prednisolone, 300 mg. of dried aluminum hydroxide gel, U.S.P., and 50 mg. of magnesium trisilicate, U.S.P., bottles of 30 tablets.

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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 374)

meeting of January 28; (b) Fee Schedules Committee (Michigan Medical Service), February 4-5; (c) Permanent Conference Committee, February 8; (d) Committee on Hospital Pharmacies (Michigan Hospital Association), February 15; (e) Mental Health Committee, January 18.

- **President W. S. Jones, M.D.,** reported he already had appeared before five component societies and seven more talks with lantern slide demonstration were scheduled in the near future.
- **Legal Counsel J. Joseph Herbert** was authorized to attend the two-day conference for medical society attorneys sponsored by the American Medical Association in Chicago, April 19-20.
- **E. C. Baumgarten, M.D., W. S. Reveno, M.D.,** of Detroit, and **Ralph W. Shook, M.D.,** Kalamazoo, were nominated for election to two vacancies on the Board of Trustees of Michigan Hospital Service.
- **MSMS is to co-sponsor the Geriatrics Conference,** in co-operation with the University of Michigan Postgraduate Department, to be held July 9-10-11, 1956, in Ann Arbor.
- **Appointment, by President Harlan Hatcher** of the University of Michigan, of L. Fernald Foster, M.D., Bay City, to a Medical Education Survey Committee (of the U. of M.) was approved.
- A. E. Schiller, M.D., Detroit, was appointed as a member of the MSMS Committee on Courses in Medical Economics and Ethics.
- **Legal Counsel J. Joseph Herbert** presented opinions on the following matters: (a) responsibility of physician in giving information to county legal authority where maltreatment of a child is suspected; (b) advantages and disadvantages of incorporation of a county medical society; (c) whether a nurse anesthetist is permitted lawfully to give spinal anesthetics.
- **Public Relations Counsel Brenneman** reported on current legislation before the Michigan Legislature of interest to the medical profession; re arrangements for Awards Dinner of March 7 in Detroit, honoring newspaper editors and radio and television executives cited in September at MSMS Annual Session for outstanding health activities and education of the public.
- **Jenkins-Keogh Bill.**—The Executive Committee adopted a motion "that the MSMS request the American Medical Association to promote the passage of the Jenkins-Keogh Bill by inaugurating a full-scale campaign under competent leadership."
- **Michigan Week.**—Executive Director Burns (a member of the Executive Committee of Michigan Week) reported on the February 15 meeting planning this demonstration of Michigan as a progressive state, the week of May 20-26, 1956.

RESOLUTIONS ADOPTED BY 1955 MSMS HOUSE OF DELEGATES

1. CALIFORNIA CANCER COMMISSION

WHEREAS, the cancer quack does untold damage with his treatment of curable cancer until it is incurable, thereby actively assisting the disease in destroying the patient, and also destroying the faith of the public in recognized methods of treatment, and

WHEREAS, the California Cancer Commission has recognized this and other facts and has maintained a Cancer Commission since 1931, and this Commission has led an active attack on quackery, and

WHEREAS, there is no doubt about the efficacy of this attack as shown by the continued reappointment and broadened activities of this Commission; therefore be it

RESOLVED: That the Genesee County Medical Society recommend to the Michigan State Medical Society that a committee be appointed to investigate the workings of the California Cancer Commission and others now functioning, and to make recommendations concerning the advisability of organizing a Michigan Cancer Commission or to utilize existing committees for the purpose of investigating, evaluating and exposing all so-called cancer cures that are presently known or may appear in the State of Michigan.

2. THE SCREENING OF FOREIGN INTERNS

WHEREAS, this problem concerns hospitals, educational programs, the physicians and the people of Michigan, and

WHEREAS, it has long been an established fact that there are almost double the number of approved internships in this country as there are American graduates to fill the available places, and

WHEREAS, the use of foreign graduates has fulfilled this need as well as encouraged the "Good Neighbor" policy established by the State Department, and

WHEREAS, a list of acceptable foreign medical schools has been prepared by the Council on Medical Education and Hospitals of the American Medical Association and the Executive Council of the Association of American Medical Colleges, and

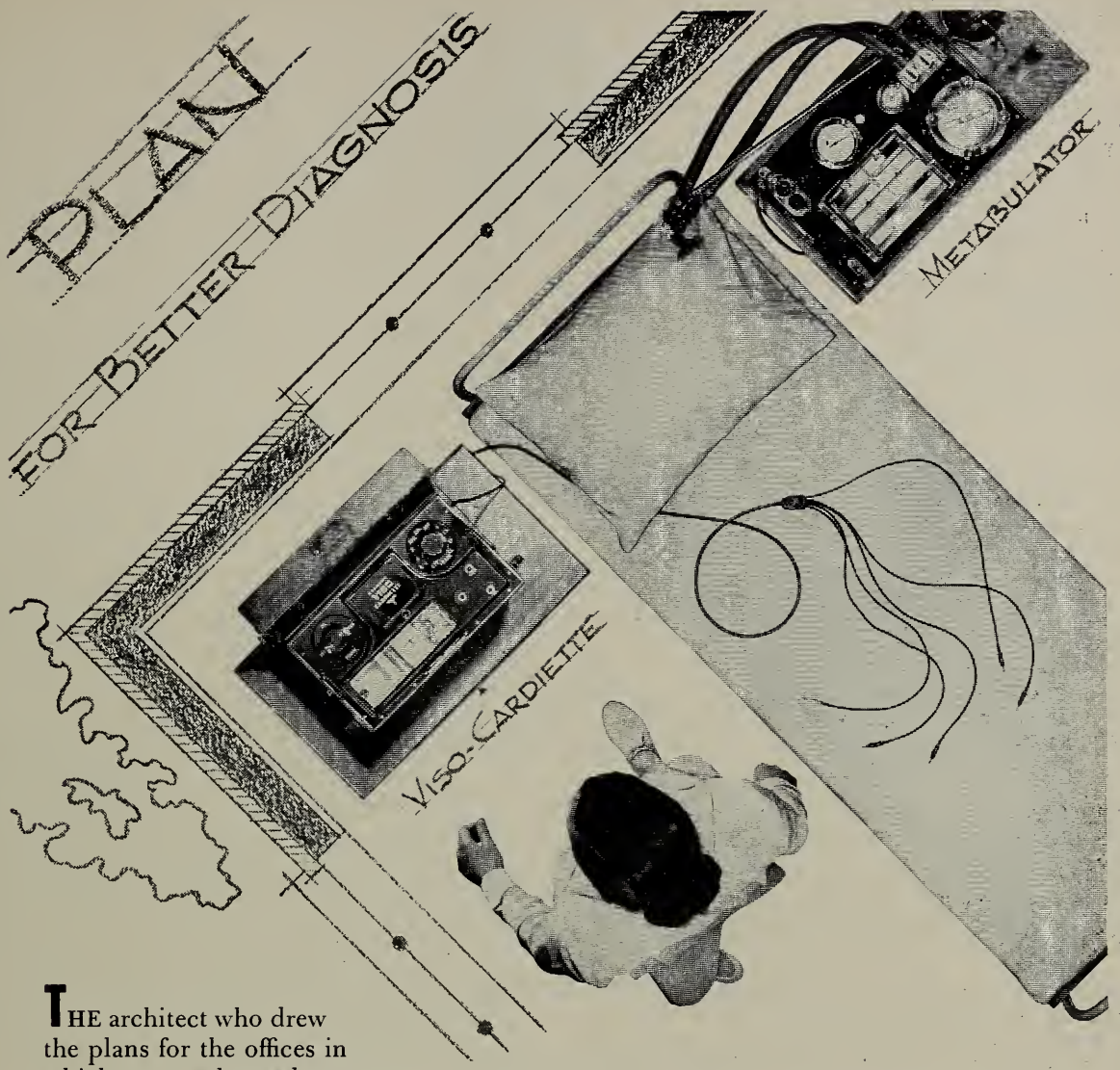
WHEREAS, in Michigan the State Board of Registration, its then Secretary, has ruled that all foreign graduates must be screened by it prior to appointment to internships, and

WHEREAS, although the hospitals wish to co-operate with the State Board of Registration in its efforts to maintain a strict supervision of all interns, it is their feeling that the "cease and desist" order and the screening requirements of the State Department of the federal government and the hospitals were sufficient safeguards to prevent the flooding of the State of Michigan with foreign graduates insofar as these graduates must fully comply with the laws and regulations prior to licensure, and

WHEREAS, the responsibility rests squarely on the hospitals and is knowingly assumed by them, and

WHEREAS, these problems were presented to the State Board of Registration and signed by representatives of both the Wayne County Medical Society and the Detroit Area Hospital Council with the approval of the governing bodies of both organizations, and no explanation or action was forthcoming; therefore be it

(Continued on Page 378)



THE architect who drew the plans for the offices in which you are located was not *completely* concerned with how the tenant would make use of the space.

That, of course, was left to *your* planning, and only you know enough of the "anatomy" of your practice to decide which furnishings and instruments are needed.

When electrocardiographs and/or metabolism testers are considered as examining aids, their inclusion in the specifications of a plan to build for better diagnosis is an important decision.

To help you determine the value of these instruments, we will gladly arrange for you to include either or both of them in your "floor plan" during a *no-obligation-to-you* trial period. This will give you an opportunity to judge them from your own point of view before the final "blueprint" is drawn and purchase is made.

When you plan with Sanborn you receive extro benefits that can come only from o direct-to-user policy. The interest in ond responsibility towards you as the user is with Sanborn Company instead of on intermediote source.

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RESOLUTIONS ADOPTED BY 1955 MSMS HOUSE OF DELEGATES

(Continued from Page 376)

RESOLVED: That the House of Delegates of the Michigan State Medical Society strongly recommend to the State Board of Registration a resumption of the previous methods of handling and admitting foreign graduates, or a modification of the present ruling which will permit a suitable time for these graduates to learn medical English before presenting themselves for examination.

3. CONTRIBUTIONS TO BEAUMONT MEMORIAL
(approved as amended)

WHEREAS, the Beaumont Memorial restoration at Mackinac Island is a monument which will stand for generations as a symbol of pioneering in medical progress, and

WHEREAS, every doctor of medicine can be justly proud of this emblem of advancing medical knowledge and of those members who have made it possible, and

WHEREAS, the public relations value of this restoration has been and will continue to be extensive, and

WHEREAS, the individual subsidy by doctors of medicine rather than by Council action will make every member more aware and a part of this worthy project; be it therefore

RESOLVED: That the House of Delegates of the Michigan State Medical Society recommend to The Council that the membership-at-large be given one more year of opportunity in which to contribute.

BRITAIN'S STATE MEDICINE POSES PROBLEMS FOR PHYSICIANS—AND FOR NATION'S HEALTH

Recently in Scotland, I had occasion to go to a doctor, and though there was nothing very wrong with my health, I did obtain some idea of what is wrong with Britain's National Health Service and socialized medicine in general.

Like nearly all doctors in Britain, this one, whom we shall call Dr. MacIntosh, has come into the National Health Service. Doctors engaged full-time in private practice are scarcely to be found beyond the bounds of London's Harley Street, for inflation and taxes have made it difficult for anyone except the very rich to engage the services of an old-fashioned private physician.

Dr. MacIntosh's consulting rooms are in what once was the servants' lodge of a Victorian town-house, where the doctor now lives. The waiting-room—a long, barren place, formerly the servants' hall—was the antithesis of the anteroom of a successful Victorian or Edwardian physician. It was cold and dreary. There was no receptionist; there were no books or periodicals, no pictures on the walls; only some 20 hard little folding chairs. When I came in, the room was full. Most of the men and women were elderly and rather shabby, but none looked particularly sick.

At last my turn came, and after Dr. MacIntosh had examined me, we talked a while. "You seem to have a great many sick people in this town," I said. "Not so very many, really," said Dr. MacIntosh. "A great many old people in this town, especially, yes."

Nothing to Do

"And you're able to treat them very quickly," I remarked. "Treat them?" he replied. "Not one-fifth of those people you saw require any treatment. They're old, and they have nothing to do, so they come to sit in my waiting room, and make me fill out forms for them. After all, this is the next best thing to the cinema."

"If they're hypochondriacs, can't you turn them away?" I asked. "That would not be prudent, in most cases," he explained. "People like that are liable to complain to the National Health Service. And the doctor can be fined, you know, by the Service; and he can be struck off the Service's list. Besides, the fees allowed per patient under the scheme are too low for any doctor to live decently if he turns particular. More than any other group with earned incomes, we doctors are hard-pressed for money in this New Order, you know."

It is all true enough. The days when a good doctor could make his fortune have passed away in Britain. In every country and every age, probably, people have grumbled about doctors making handsome livings out of other people's afflictions. But when this vague resentment is elevated to the condition of a political dogma, and the doctor is reduced by law to the condition of a minor civil servant, with his remuneration fixed accordingly, regardless of his competence—then the question of rewards and incentives comes gravely to the fore.

Lost Status

Most doctors now practicing were trained before the National Health Service came into being, and so must remain in their profession whether they choose or not. But it may not be easy to secure good doctors in the next generation. When the physician and surgeon lose their old status of independence and social dignity, and lose also their once-considerable financial incentive, it may be very difficult to attract to the profession people of real competence and real diligence.

Not all doctors, it's true, are worse-rewarded under the National Health Service. A minimum salary is fixed, so that doctors in out-of-the-way places, where patients are few, may be better off than they were in the old days. The unpopular or less competent doctor, too, may benefit by this leveling process. And the dentist—more by an administrative miscalculation and a backlog of decayed British teeth, perhaps, than by design—is generally better paid than he was before. But by and large the medical profession is now a comparatively depressed calling in Britain.

Nor is the status of the doctor himself the only element to be considered in this problem. The question now is being seriously raised, in sober English journals, whether the general effect of the National Health Service, in the long run, will actually operate to improve the health of the nation.

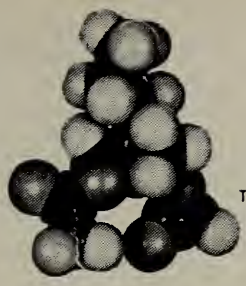
Crowding and Abuse

Whatever is free tends to be held cheap. Free access to the consulting-room may very well lead to such a crowding and abuse of state medical facilities that the people really in need of medical attention are neglected, necessarily, because they are mixed with a crowd of hypochondriacs, bored old people, and people who insist upon their share of attention simply because they are paying for it through taxes. The recent return to charging—at least nominally—for prescriptions issued under Health Service regulations has reduced such abuses somewhat, but the misuse of medical benefits extends far beyond mere prescription collecting.

Dr. MacIntosh and physicians like him certainly do not object to decent medical facilities for everyone. Most of them believe that the more prosperous countries of the Western world now can afford a reasonable measure of medical care for everyone. But there are limits to how much any state can afford to spend simply on health schemes, and the budget of the National Health Service now far exceeds even the most lavish original official estimates of its probable cost.

The question is not one of the desirability of the goal; it is one of means. There are sound reasons for believing that a general improvement of British health

(Continued on Page 380)



THE MILTOWN MOLECULE

Two articles in the April 30th issue of The Journal of the AMA[1,2] report on . . .

an entirely new type of tranquilizer with muscle relaxant action—orally effective in

ANXIETY, TENSION and MENTAL STRESS

- no autonomic side effects—well tolerated
- selectively affects the thalamus
- not related to reserpine or other tranquilizers
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Literature and Samples Available On Request

BRITAIN'S STATE MEDICINE

(Continued from Page 378)

might have been better effected by systems of health insurance, increase of the funds and activities of private and voluntary and co-operative hospitals and medical services, and local—rather than centralized—schemes for improving the health of the poorer people.

Obedience to Ideology

The National Health Service was created out of obedience to socialist ideology, rather than out of any serious examination of the problem and its possible solutions. Indeed, it is a paradox that a vast system of impersonal state charity in medicine has been adopted in Britain precisely at the time when the "poor," in the old sense of that term, have been abolished—at least, the socialists claim they have been abolished.

Many times as much money is spent in Britain on drink, or on football pools, as is spent on private medical attention, and this was true even before the National Health Service was proposed. In the United States, where the public spends a greater proportion of income on medical attention than in any other country, only about 4.5% of family income goes for medical attention. Nearly an equal amount goes for alcoholic beverages; half as much goes for tobacco; and a good deal more goes for recreation. We are living in an age, in short, in which the average man can afford to pay for whatever medical attention he requires, with the exception of the really poor, who are a small minority.

Yet what has been adopted in Britain, and what is sometimes proposed in the United States, is a doctrinaire nineteenth-century solution, socialized medicine, to a problem the terms of which have altered immensely in the twentieth century. In a society of material abundance, state medicine is an obsolete answer.—Russell Kirk in *Wall Street Journal*, February 1, 1956.

LICENSURE EXAMINATIONS

The next licensure examinations of the Michigan State Board of Registration in Medicine will be held on Monday, Tuesday and Wednesday, June 11, 12 and 13, concurrently in Ann Arbor and Detroit at the University of Michigan Medical School and Wayne University College of Medicine. The examination application form and fee in the amount of $50.00 must be on file in the office of the Secretary of the Board, 118 Stevens T. Mason Building, Lansing, Michigan, no later than May 18, 1956.

In Lansing

HOTEL OLDS

Fireproof

400 ROOMS

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physician groups in Michigan, follows:

1956		
Spring	MSMS Postgraduate Extramural Courses	Statewide
May 3	Twenty-Eighth Annual May Clinic, Ingham County Medical Society	Lansing
May 8-9	Annual Clinic Day and Alumni Reunion, Wayne University College of Medicine	Detroit
May 16	MSMS Executive Committee of The Council	Detroit
June 4-7	American Cancer Society, Sheraton-Cadillac Hotel	Detroit
June 11-15	Annual Session, American Medical Association	Chicago
June 20	MSMS Executive Committee of The Council	Muskegon
June 22-23	Upper Peninsula Medical Society	Sault Ste. Marie
June 28	Keyport Trauma Day	Gaylord
July 9-11	Gerontology Conference	Ann Arbor
July 19-21	Mid-summer Session of the MSMS Council	Mackinac Island
August 22	MSMS Executive Committee of The Council	Detroit
August 30-31	Coller Penberthy Medical Conference	Traverse City
September 10-13	International College of Surgeons, Annual Congress	Chicago
September 24-25	Annual Session of the House of Delegates (MSMS)	Detroit
September 26-28	MSMS Annual Session	Detroit
September 23 & 28	The Council (MSMS)	Detroit
October 11-12	Michigan Cancer Conference	East Lansing
October 17	MSMS Executive Committee of The Council	Battle Creek
Autumn	MSMS Postgraduate Extramural Courses	Statewide
November 14	MSMS Executive Committee of The Council	Detroit
November 27-30	AMA Clinical Session	Seattle
November	Fall Clinic, Michigan Academy of General Practice	Detroit
December 12	MSMS Executive Committee of The Council	Lansing

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Supplied: Tablets, 400 mg., bottles of 50.

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anti-anxiety factor
with muscle-relaxing action
...relieves tension

Unity Spells Progress with Michigan Cancer Co-ordinating Committee

The Michigan Cancer Co-ordinating Committee was formed on November 12, 1953. It is composed of representatives of the following state agencies interested in cancer control:

American Cancer Society, Michigan Division, Inc.

American Cancer Society, Southeastern Michigan Division

Michigan Department of Health

Michigan Health Officers Association

Michigan State Dental Association

Michigan State Medical Society

During its first years, the Michigan Cancer Co-ordinating Committee justified its existence by stimulating cancer education, both professional and public, and by encouraging each of its component members to further endeavor in a co-ordinated non-overlapping program. Its accomplishments in just a brief period are too numerous to list in an article. Its future is bright with a program that encompasses every facet of cancer control in the State of Michigan.

The MCCC is a committee to review and to activate its member organizations to a greater effort in the fight against cancer. While it is not an action committee in itself, it is a stimulator of activity on the part of the formalized groups which compose it. The results in just a brief period of time speak for themselves.

The personnel of the Michigan Cancer Co-ordinating Committee is:

Member-Organization

American Cancer Society
Michigan Division
American Cancer Society
Southeastern Michigan Division
Michigan Department of Health
Michigan Health Officers Association
Michigan State Dental Association
Michigan State Medical Society

Representatives

C. A. Payne, M.D., Chairman, Grand Rapids
L. E. Holly, M.D., Muskegon
Mr. W. F. Doyle, Lansing
Mr. A. S. Albright, Detroit
M. A. Darling, M.D., Detroit
H. M. Nelson, M.D., Detroit
J. A. Cowan, M.D., Lansing
J. D. Heaslip, M.D., Hastings
B. E. Luck, D.D.S., Lansing
R. C. Hildlreth, M.D., Kalamazoo
W. A. Hyland, M.D., Grand Rapids
E. T. Thieme, M.D., Ann Arbor
J. M. Wellman, M.D., Lansing

The patient with cancer of the esophagus has a good prospect of cure if the lesion is discovered and removed while it is still confined to the esophagus.

* * *

Unfortunately, only a small proportion of patients with cancer of the esophagus come to the surgeon while the disease is still local.

* * *

Cancer of the esophagus is predominantly a disease of males; the ratio to females is five to one.

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Member American Hospital Association

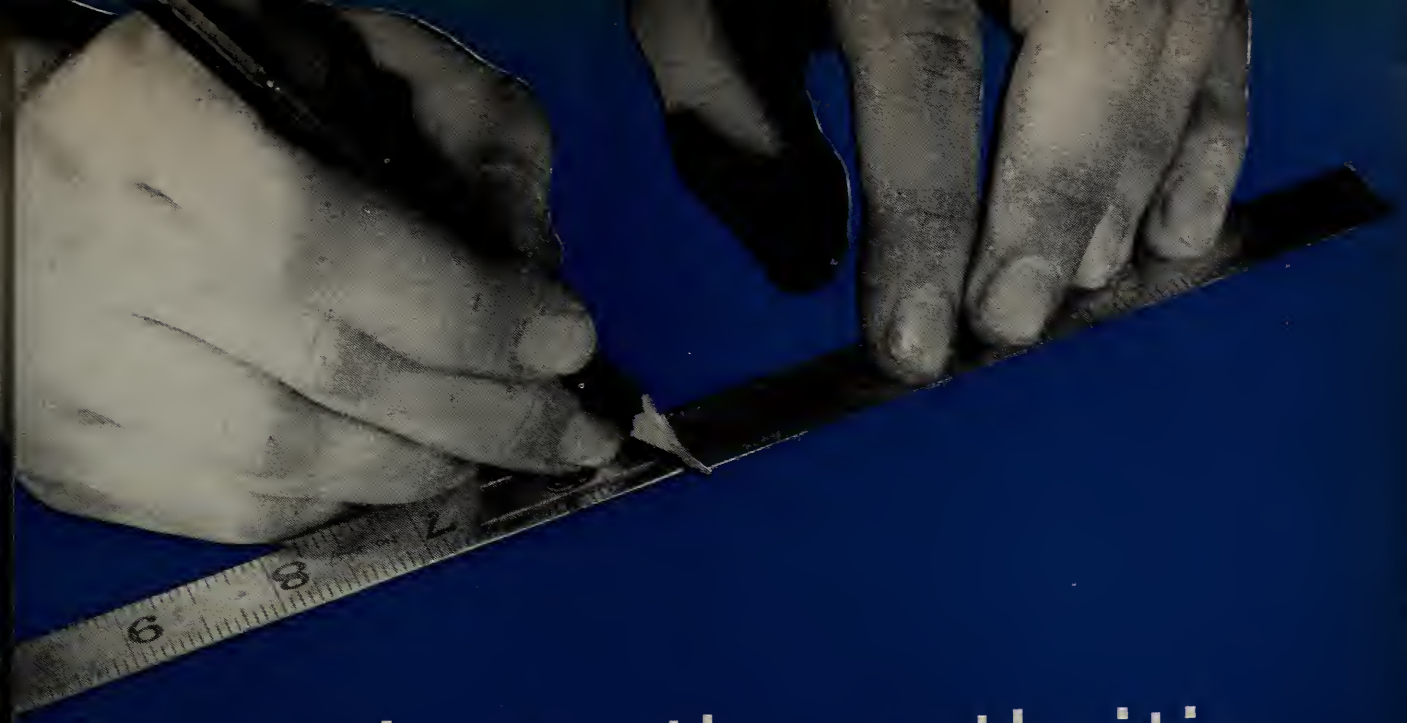
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Re-activate the arthritic

MOST POTENT ANTI-RHEUMATIC *

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Even where hydrocortisone, cortisone, and other agents had failed, prednisolone (STERANE) restored articular mobility and functional capacity to normal in rheumatoid arthritis.[1]

Four times more effective than hydrocortisone, and, on the basis of preliminary findings,[2,3] superior in potency even to prednisone (cortisone analog), STERANE is also relatively free of such hormonal side effects as edema, hypertension, or hypopotassemia.

Supplied: White, 5 mg. oral tablets, in bottles of 20 and 100. Pink, 1 mg. oral tablets, in bottles of 100. Both are deep-scored and in the distinctive "easy-to-break" size and Pfizer oval shape.

References: 1. Bunim, J. J., et al.: J.A.M.A. 157:311, 1955. 2. Forsham, P. H., et al.: Paper presented at First Internat. Conf. on Prednisone and Prednisolone, New York, May 31-June 1, 1955. 3. Perlman, P. L., and Tolksdorf, S.: Scientific Exhibit presented at A.M.A. Annual Meet., Atlantic City, June 6-11, 1955.

PFIZER LABORATORIES Division, Chas. Pfizer & Co., Inc. Brooklyn 6, New York

*brand of prednisolone

AMA Washington Letter

THE MONTH IN WASHINGTON

A little-publicized study group of eight physicians and scientists has submitted a report to the Secretary of Health, Education, and Welfare that promises to stimulate considerable debate by all interested in medical research, including members of Congress.

The committee was appointed by the National Science Foundation a year ago at the request of former HEW Secretary Hobby for "a critical review" of the scope and distribution of all phases of medical research where U. S. funds are used. Heading the committee was Dr. C. N. H. Long of the Yale School of Medicine.

Three basic proposals of the committee:

(1) That reasearch within the National Institutes of Health research be levelled off, and policy and personnel matters there be brought under the scrutiny of an advisory board of non-governmental medical scientists.

(2) That other research under the Public Health Service, including teaching grants to institutions and fellowships, be put under a new Office of Medical Research and Training reporting directly to the HEW Secretary and outside the control of PHS.

(3) That emphasis be placed on general research rather than the present trend of specific grants for specific disease studies, the so-called categorical approach.

On receipt of the report, Secretary Folsom promised it would be studied "intensively" both by HEW and PHS officials, but he set no time deadlines.

The Long Committee noted the tremendous growth in federal medical research during and since World War II and the increasing role played by PHS. While conceding that PHS has done its job effectively, the committee felt that the time has come to re-examine the concentration of activities under one agency.

On its first point the committee said NIH is making a major contribution in medical research and that senior appointments there should actually become "the most sought after in the country." It suggested legislation that would permit employment of research scientists at the Institute without regard to commissioning in the PHS Corps or salary limitations imposed by civil service.

On its second basic proposal, the committee recommended that the new agency have authority over (a) unrestricted, long-term institutional grants, (b) grants for research, both categorical and non-categorical, (c) fellowships and traineeships in medical and related areas, and (d) grants for construction of research and teaching facilities.

Commenting on the categorical approach to research, the committee said the public has been "led to believe. consciously or unconsciously, that the donation of sufficient sums of money is all that is needed to eradicate diseases which have plagued mankind for centuries."

In Congress, any move away from categorical grants in medical research is certain to produce fireworks. Some Senators and Representatives believe it's Congress' responsibility to pinpoint where money it appropriates is to be spent, and they are not inclined to make an exception for research money.

* * *

Two bills on military medical legislation went through the House without change, after detailed hearings and study by a subcommittee. The expectation is that action on them will not be long delayed in the Senate.

One is designed to make military medical careers more attractive by allowing credit for time spent in medical school and internship, and setting up a series of three $50 per month raises after three, six and 10 years' service. These would be in addition to the present $100 per month special pay for medical officers. Public Health Service medical officers would benefit, as well as those in Army, Navy and Air Force.

The other bill well on its way to becoming a law allows dependents of servicemen to receive private hospital and medical care, with the government paying the costs of the insurance or health plan coverage and the dependent the first $25 of the hospital bill. The Secretary of Defense, however, could limit or deny such private care in areas where he determines that military medical facilities are adequate to handle the service families.

Notes

Some of the pharmaceutical houses have told Secretary Folsom that they plan to use more personnel and equipment to step up production of Salk vaccine, but his expectation still is that it will be "many months" before there will be enough vaccine for three shots for "all who need them."

Almost all medical programs handled by U. S. Public Health service are virtually assured of comfortable increases in money for next fiscal year.

(Continued on Page 386)

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Tablets

Each tablet contains:
Methscopolamine bromide 2.5 mg.

Average dosage (ulcer):
One tablet one-half hour before meals, and 1 to 2 tablets at bedtime.

Supplied: Bottles of 100 and 500 tablets

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*TRADEMARK, REG. U. S. PAT. OFF.—THE UPJOHN BRAND OF METHSCOPOLAMINE

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PR REPORT

IT'S BEEN WIDELY PUBLICIZED already, but the recent AMA public opinion survey made "in order to find out what might be needed to improve doctors' services" brought some very interesting conclusions which might be considered by county medical societies in PR program planning for the future. Following is a very brief summary of the findings, extracted from a recent AMA Secretary's Letter:

"From (the survey) emerged a picture of what people like about and expect from their doctors: sympathy, patience, and understanding, rather than guaranteed cures and 'wonder drugs' . . .

"Major items shown by the survey are: (1) Most Americans have their own family doctor; (2) Most of them like him, and like doctors as a group; (3) People's opinions gained from their own experience differ from those based on hearsay or other sources; (4) Doctors are more critical of themselves than other people are of them; (5) When people criticize physicians, it is largely for the cost of care; they do not, however, think doctors are trying to 'get rich quick'; and (6) They are evenly split for and against 'sliding scales' of fees."

The poll was conducted among a very carefully selected sample of 4,000 persons. County PR Committee chairmen who have not seen the complete compilation may write MSMS for a copy. The supply is limited.

"MAN'S CONQUEST OF DISEASE," a brief but well-done account of the medical discoveries which have lengthened our life span, was one of the most notable local television programs presented recently with County Medical Society cooperation. Well-documented and illustrated, it was presented over WNEM-TV, Bay City, and featured Orlen J. Johnson, M.D., Public Relations Chairman for the Bay County Medical Society, with John J. McKeighan, Sr., of Flint, President of the National Pharmaceutical Association. Another local TV series which has never received all the notice it deserved was presented last fall over WOOD-TV by the Kent County Society, with PR Chairman Fred C. Brace, M.D., in charge. Three very excellent shows were presented, requiring participation by a large group of society members.

MEDICAL EDUCATION WEEK, April 22-28, first such observance ever scheduled, is attracting nationwide attention. In Michigan the event is being helped along by co-operation of MSMS, its Woman's Auxiliary, and several county societies. Among the materials prepared for distribution during the week is a 1955-56 edition of the very well done AMA brochure, "What's Up With Our Medical Schools?" The booklet is recommended for anyone who wants the facts on American medical schools, their enrollment, entrance requirements and finances. The eight-page publication, available through MSMS, explodes a number of myths relative to medical school admissions.

Another special observance, National Hospital Week, May 6-12, is being boosted in many communities through the individual efforts of MSMS and Auxiliary members. Emphasis this year is on the many ways hospitals serve their areas, built on the theme "Your Hospital—for You and Your Community."

"THE OUTSTANDING CITIZEN OF THE YEAR" is selected in a number of communities either by the local Chamber of Commerce or its junior counterpart. Since the honor is usually conferred for general good citizenship and civic responsibility, it's always gratifying to see an M.D. win such recognition. The most recent recipient to be noted is Mark Osterlin, M.D., who was chosen as Traverse City's outstanding citizen of the year by the Chamber of Commerce. Noting Dr. Osterlin's leadership in a number of community activities over a long period of years, an editorial column in the *Traverse City Record-Eagle* made this observation:

"It is largely Mark's own fault that he was not selected for this honor earlier, for the many things he has accomplished for his community have been done without fanfare and with very little public notice. He's a very poor self-publicist, which makes his selection all the more pleasing."

Such community recognition serves the best interest of the entire medical profession.

AMA WASHINGTON LETTER

(Continued from Page 384)

The House approved recommendations of its Appropriations Committee without change. The only large reduction was $19 million in money for the Hill-Burton hospital construction program, the committee explaining this action was taken because the "new" HB program (for clinics, chronically ill hospitals, nursing homes, rehabilitation centers) is getting off to a slow start.

A new suggestion for helping to pay for medical care comes from Rep. Charles S. Gubser (R., Calif.). He is proposing that full income tax deductions be allowed for all medical expenses of children under six years of age.

benefits of prednisone and prednisolone plus positive antacid action to minimize gastric distress...

A reportedly higher incidence of gastric distress in patients receiving the newer steroids prednisone and prednisolone indicates the desirability of co-administering non-systemic antacids.[1]

To help the physician cope with this problem of gastric distress which might otherwise become an obstacle to therapy with the newer steroids . . . Multiple Compressed Tablets 'Co-Deltra' (Prednisone Buffered) and 'Co-Hydeltra' (Prednisolone Buffered) are now available.

'Co-Deltra' and 'Co-Hydeltra' are now available in bottles of 30 on your prescription. Each Multiple Compressed Tablet contains:

Prednisone or Prednisolone, 5 mg.; 300 mg. of dried aluminum hydroxide gel, U.S.P., and 50 mg. of magnesium trisilicate.

'Co-Deltra' and 'Co-Hydeltra' are trade-marks of Merck & Co., Inc.

1. Bollet, A. J., Black, R., and Bunim, J. J.: *J.A.M.A.* **158**: 459, June 11, 1955.

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Prednisolone Buffered

SHARP & DOHME

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Editorial Opinion

MAYBE IT'S NOT TOO BAD

The editors of the *New York State Journal of Medicine* point out that the amount of attention given to health problems and to Medicine's attempts to solve them has increased enormously during the past three decades, and they suggest that physicians are mistaken in supposing most of that attention to be unfriendly.

Mr. Dan Mich, editorial director of *Look,* recently released the results of a survey which his research department had compiled. On four medical subjects — cancer, tuberculosis, heart disease and poliomyelitis—no more than thirty articles appeared during the year 1923, and nineteen of those were on tuberculosis. None of the magazines that published them had what could be described as "mass circulation." During 1953, just thirty years later, there were 299 articles on the same four subjects, all of them in popular magazines. The *Saturday Evening Post* regularly prints between twenty and thirty a year; *Good Housekeeping* includes one in each of its issues.

The New York editors are inclined to think it unreasonable for doctors to show distress over finding a few onions among so many lilies. And though they plead, somewhat parenthetically, for facts rather than evaluations from medical science writers, they are in favor of encouraging non-medical publications to devote more, rather than less, space to health topics.—Editorial Comment in the Journal of the Iowa State Medical Society, November, 1955.

GLAUCOMA IN GENERAL MEDICAL PRACTICE

It is not commonly recognized by the general practitioner that he may be an important factor in preventing much unnecessary blindness from glaucoma. The general practitioner is the first recourse of persons in pain, with physical disabilities or discomfort. His patients properly look to him as the responsible adviser in all matters of physical welfare.

Should a patient's illness require the services of a medical specialist, the patient relies on the family doctor to identify the disease and, on his behalf, to arrange for the kind of special treatment which he may require. Within the last few years chronic simple glaucoma, which unfortunately is an insidious disease, has become recognized as a major problem in the prevention of blindness. In the age bracket over forty years, the incidence of glaucoma in the general population is conservatively estimated at 2 per cent. The general practitioner can expect this proportion of glaucomatous cases among his patients in this age group.

Chronic simple glaucoma in its early stages can usually be controlled without serious loss of vision. It is a progressive disease, and the later the discovery, the less likelihood for maintaining useful vision. The bitter thing about the disease is the usual absence of warning signs until the condition has progressed to the point where vision is affected. Usually the only early sign is increase in intraocular pressure or tension. This sign, in turn, is often intermittent in character. When intermittent, it is more likely to be present at periods of stress or emotional anxiety. The patient would be unlikely to call upon an ophthalmologist during the early stages of the disease. The general practitioner is, therefore, his main recourse for early diagnosis.

Examination for glaucoma, even in its early stages, is not an unrewarded effort. The certainty that among his patients the general practitioner will find early victims of glaucoma who can in most cases be saved from serious loss of vision or blindness is a fact of major importance.

The same check for ocular tension will warn him concerning the use of atropine, belladonna, and hyoscine which may exacerbate glaucoma when the disease is present. In respect to glaucomatous patients the physician should also assure himself that there are no allergies to drugs which might otherwise appear to be indicated for topical application to the eye.

Glaucoma in certain stages may be mistaken for iritis and conjunctivitis. Because of this confusion, delay in treating glaucoma properly may result in serious loss of vision.

General symptoms of glaucoma, especially nausea and vomiting, may falsely suggest the diagnosis of gastrointestinal pathology, particularly in instances in which the exploratory type of laparotomy appears to be indicated. As these serious symptoms occur only in acute glaucoma, a delay of even thirty-six hours in administering proper treatment may result in irreparable loss of vision.

The foregoing examples of improper diagnosis are readily resolved in most cases, particularly those with general symptoms, by taking ocular tension. This can be done in approximately three minutes.

More than 400 ophthalmologists are currently co-operating with the Ophthalmological Foundation and offering instruction to physicians in detecting ocular tension and other signs and symp-

(Continued on Page 392)

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GLAUCOMA IN GENERAL MEDICAL PRACTICE

(Continued from Page 390)

toms relating to the recognition of glaucoma. Undoubtedly many other ophthalmologists throughout the United States can be counted on for similar services. The necessity for this specialized instruction has been more fully appreciated during the last few years in which glaucoma has been recognized as a major cause of visual impairment. Since most patients over thirty years of age may be seen only by general practitioners, it appears to devolve upon them to detect glaucoma in the early stages because the patients may have no symptoms which lead them to suspect the presence of this serious eye disease.

General practitioners have always met their great responsibilities with constructive action, and they may be counted on to co-operate in the detection of glaucoma which is so important to the patient's vision and health.—Conrad Berens, M.D. in *New York State Journal of Medicine,* January 15, 1956.

LOCAL ANESTHESIA—A LOST ART?

"Some months ago, an anesthesiologist was approached by a surgeon with the following query, "Will you handle Mrs. X in the morning, she's a rather difficult problem." The former consented readily (the operation was posted as the removal of a growth on the face). Thinking that the growth was malignant and that possibly its removal was to be combined with a neck dissection, he thought little of the request. The patient in question turned out to be eighty-four years of age. She had been digitalized for the previous eighteen years and was at best a very poor candidate for any type of surgery and an extremely poor anesthetic risk. On further inquiry, it was discovered that the excision of a small nevus was being done at the patient's insistence since she feared the development of cancer. The patient had not anticipated general anesthesia and was well pleased when she discovered that she did not have to go to sleep. The surgeon was somewhat abashed when the suggestion was made that local anesthesia be used. Under many circumstances, the very best anesthesiologist is no substitute for a properly administered local anesthetic. Yet in the past twenty-five years, surgeons have been "slipping away" from the use of local anesthesia, some even reaching the point of apparently forgetting that local agents exist."—Editorial in the *Journal of the Medical Association of Florida,* October, 1955.

A lady, who had entered a contest with John L. Lewis to decide which of them had the largest and bushiest eyebrows, was heard to exclaim, "He browbeat me."—*The Mediator,* December-January, 1955-56.

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

VOLUME 55 APRIL, 1956 NUMBER 4

Functions of a State Cancer Co-ordinating Committee

By Harry M. Nelson, M.D.
Detroit, Michigan

FEW subjects have held the attention of the health-conscious public more closely in the last few years than the cancer control problem. Each day, the problem comes further into the public spotlight, as newspapers, radio, television, magazines, and other media shed their former reluctance to mention cancer and are raising the curtain of silence which so long impeded the spread of knowledge about the disease.

As public apathy toward cancer diminishes, more and more people are being drawn into various phases of the control effort. This newly-kindled interest has enabled organized medicine, agencies and institutions engaged in combatting the disease to expand their programs, to add more personnel, to train new people, and to forge ahead in the work which has been so tragically delayed.

Increasing funds have been made available. This year, Congress appropriated $24,828,000 for cancer control. Of this amount, $16,246,000 are for grants-in-aid outside the U. S. Public Health Service. They include research fellowships to young scientists; grants to medical schools for teaching of cancer and for specialists such as virologists or cytologists; support for state programs of cancer control such as clinics, education, et cetera, and field investigations of such cytology pilot projects as that in Memphis and Detroit.

The remainder of the governmental appropriation is for the operation of the great new Clinical Center at Bethesda, Maryland, and the fundamental research at the National Cancer Institute.

Last year, the American Cancer Society raised approximately the same amount of dollars as Congress appropriated, that is, $24,400.000. The 1956 goal of the Society is $1,600,000 over that amount. Of this, 28 per cent will be allocated to research. A grand total of around $25,000,000 is now made available annually for cancer research.

The American Cancer Society's annual campaign in 1955 raised approximately $24,000,000—more money than ever before donated by the public for cancer research, education and service. Compare this with 1946, when the Cancer Society made its first large appropriation of $2,500,000 for research, and other agencies, both governmental and voluntary, were spending only an additional $500,000.

It has been estimated that cancer will at some time strike one in every four Americans, or 40,000,000 Americans now living will at some time develop cancer; 25,000,000 will die unless new treatments, cures or preventive measures are found. This impending tragedy makes it imperative to utilize the wisest possible expenditure of manpower and funds for cancer control.

There has been a determined effort in the United States, from the national to the local level, to eliminate, as much as possible, duplication of effort, time and money spent in cancer control. The United States public health program, integrated closely with the work of the American Cancer Society and supplemented by the efforts of private foundations and medical schools, has helped to instigate a united attack on the disease

on all fronts. To be certain that the public's money, both private and taxed, is spent to the best possible advantage and with the least duplication, the National Cancer Institute of the United States Public Health Service and the American Cancer Society work closely together. In fact, their boards are inter-related. The Society has stimulated governmental appropriations for cancer activity, and each year has arranged testimony in support of the National Cancer Institute budget. As a result, the National Cancer Institute last year received the largest appropriation in its history, including a substantially increased research allotment.

Recently, the American Cancer Society appointed a committee to study the problem of cancer quackery. Its chairman is Donald Johnson of Flint, Michigan, who is a national director of the Society. Cancer quackery has always been with us, but in recent years it has been exploited and publicized to an extent where many lives are being lost and great sums of money are being fleeced from an unsuspecting public. This committee co-operates with the national Committee on Diagnosis and Therapy, which was appointed by the National Research Council, and endorsed or sponsored by the American Cancer Society, the National Cancer Institute, American Medical Association, Damon Runyon Fund, and the Pure Food and Drug Administration. These committees offer assurance that doctors are ready to receive and examine new responsible methods of diagnosis and treatment from any source.

The American College of Surgeons, with the co-operation and assistance of the Cancer Society, both nationally and locally, has established an accreditation requirement for hospitals conducting cancer programs. As of December 31, 1955, any hospitals desiring approval of the College of Surgeons, must have a properly functioning cancer registry in operation, which records every patient, private and public, in-patient and out-patient, upon whom the diagnosis of cancer is established.

Organized medicine on a national scale has indicated increasing interest in the development of effective liaison between voluntary health agencies, official health agencies, and the American Medical Association. It has established a committee on relationships between medicine and allied health agencies, known as the Shipman Committee. Its aims are to assist in the development of constructive programs, legislative and otherwise; to insure the co-operation of medicine and the voluntary health agencies in accomplishing its objectives; to influence the voluntary health agencies to plan their programs in such a way as to preserve in individuals and families the sense of their responsibility for their own medical welfare; and to co-ordinate the efforts of voluntary health agencies and public health.

Just as the need to co-ordinate cancer control on a national level is recognized and is being achieved, there is a tendency to develop inter-related co-ordinating committees on a regional and community level. This is most important because it is at the neighborhood level where immediate and real relief can be obtained and where the social burden, the economic loss, the mortality, and long term invalidism can be alleviated.

The most important agencies operating on a community level in cancer control in most of the states in the United States are:

1. The American Cancer Society, the only voluntary health agency in the United States devoted to the control of cancer through a comprehensive program of education, service and research.

2. The cancer committees of the state medical societies. Most county medical societies also have cancer committees which work closely with the American Cancer Society on community levels and supervise the medical activities of the American Cancer Society.

3. State and county health departments have cancer control divisions which co-operate with other agencies in state-wide programs.

So closely related are the programs of some of these organizations, that there is often unintended duplication of programs, resulting in unfortunate expenditure of time, effort and funds—a waste which might have been prevented by the joint exchange of ideas, plans and experience.

There can be a real force behind the suggestions offered by a well-integrated, devoted committee. The State of Pennsylvania has developed the most ideal cancer co-ordinating committee and Michigan has formed its committees along this pattern. From viewing the work done in Pennsylvania and in Michigan, I believe that a still stronger unity can be achieved between the participating agencies and the American Cancer Society. The prime impetus must come from determined effort and complete, unselfish dedication. However, in order to channel this effort properly,

the mechanics of the committee must be formed to provide a smooth working unit from which new programs can evolve.

Today about one-half of the American Cancer Society's sixty divisions are members of cancer co-ordinating committees. In most instances, however, those that have not established such a committee, have representatives of the medical society, the health department, medical schools and dental societies on their own local executive committees or boards of directors.

In actual practice, there is a wide range of difference in the duties and authority of the various co-ordinating committees. It has been shown that the committees function most effectively when they act in a purely advisory capacity. The purpose and the action of the committee are defeated when they are delegated administrative and program responsibilities.

Equally impractical is the belief that adequate leadership can be obtained through a well trained and experienced individual acting as administrator for the cancer co-ordinating committee and thus for the entire control program throughout the state. Besides subjugating the power of the committee, the administrator cannot efficiently advise the allocation of funds, since their sources differ so greatly. For example, taxes are the source of the health department's income; voluntary contributions, of the American Cancer Society's; and dues, of the medical societies'.

Ideally, the American Cancer Society, the state medical societies, the state department of health and, in some instances, the medical schools and dental societies should have an opportunity to merge in a co-ordinated effort. Co-ordinating committees, composed of representatives of each of these organizations, can be of tremendous help in eliminating waste of funds and effort and can strengthen the inter-relationships of the various groups.

The co-ordinating committee meets regularly to review and evaluate the activities of the several agencies, advise continuation, change or discontinuance of their activities. The committee's decision must be subject to the approval and action of the involved agency but, through their decision, must attempt to encourage direct cooperation between the separate agencies.

At an annual meeting, the programs, financial report, and plans for the following year are thoroughly scrutinized by the entire committee. Suggestions for the improvement of existing or contemplated programs are made and some "weeding out" of ineffective approaches, as well as rejection of new proposals, often occur.

In most instances, as in the State of Michigan, appointments to the co-ordinating committee are made annually by their participating agencies. The appointees serve for the following full calendar year, or until their successors are duly appointed. Officers are a chairman, a vice-chairman and a secretary, who are elected annually. Meetings are held at the discretion of the chairman or at the request of any of the agencies. Expenses that are incurred and approved by the committee are paid on a pro-rated basis by the component agencies.

Ordinarily, the chairman is a member of the cancer committee of the state medical society. He renders reports of the co-ordinating committee to the Council of the medical society, and members of the committee report back to their respective organizations.

The cancer control program in most of the states consists of lay education, professional education, diagnosis and treatment of cancer, in combination with a statistical program, a research program, a campaign for funds, a financial report, and plans for the future. Where there is a cancer co-ordinating committee, the responsibilities of the member organizations are generally defined as follows:

Lay education seems to be primarily a function of the American Cancer Society. The Society prepares, executes and finances publications. It prepares magazine, newspaper, radio and television materials, posters, speeches, films, exhibits and other educational media from basic material provided by the state health department and the cancer committee of the state medical society. It also maintains information centers in urban communities, promotes cancer education in business and industrial organizations, arranges talks to lay groups by physicians or trained personnel, and encourages cancer education in secondary schools and colleges. In the development of school educational programs, it is generally felt that a strong union of our forces can be of considerable assistance. American Cancer Society divisions, operating individually, have experienced some difficulty in arousing the school administrators' interest in making cancer education part of the regular curriculum, but with the combined efforts of strong, influential and talented representatives of the co-ordinating committee agencies, an ap-

proach might be extremely successful. The committee should encourage teacher training institutes to meet the needs for school health programs through adequate pre-service and in-service training, in addition to promoting the use of material which has already been developed for classroom use.

Professional education is generally assigned to the medical and dental societies, with *"tools"* which have been produced and made available by the divisions of the American Cancer Society. The members of the state medical society, with the cooperation of the county medical societies and the state department of health, prepare and publish articles in the medical journals. They also prepare specific factual information for distribution to all practicing physicians. These organizations also sponsor conventions, symposia, movies and exhibits, refresher courses, fellowships, intern and undergraduate training. Many of these programs are often subsidized by grants from the ACS. Excellent implements for professional education are available from the Cancer Society nationally. Such facilities include films, a cancer library, speakers, film loan library, publications, exhibits and lantern slides on various phases of the picture. Actual training of public health nurses, statisticians, and social workers with reference to cancer is done by the state health department.

The diagnosis and treatment of cancer is relegated to the cancer control committees of the state medical and dental societies. The medical society encourages detection examinations of well persons in both doctors' offices and in detection centers. It also sponsors tumor clinics and registries. Financial assistance for examinations in detection centers and physicians' offices may be provided by the ACS and the state health department.

Statistical studies into the morbidity and mortality of cancer is usually a function of the state department of health, which also promotes and supports tumor clinics throughout the state. The sum of $2,500,000 was given by the U. S. Public Health Service last year to state health departments for the establishment of clinics and services to cancer patients. The grants to states are made on a population basis.

Since every approved cancer hospital must have a registry, the department of health can contribute to the effectiveness of the registry by providing assistance to the hospitals in establishing a registry. Vital statistics furnished by the health department has been found to save time, effort and embarrassment, since the knowledge of death of a patient precludes the necessity for attempting other methods of follow-up. The task of raising funds for cancer control is primarily the function of the American Cancer Society.

Because of the complexity of the cancer research problem, co-ordination must necessarily be achieved nationally. The ACS is the major voluntary agency supporting cancer research. It exchanges complete information on grants with the other voluntary cancer agencies, thus avoiding duplication of effort, and enabling applicants for financial assistance to contact the agency most likely to make a grant. I already have mentioned the close working relationship between the National Cancer Institute, the National Research Committee and the American Cancer Society. State or county units supporting research are encouraged to clear their projects with the national office. To do otherwise might seriously jeopardize the effectiveness of the national research program.

The consensus among those most intimately concerned with the problem of cancer quackery and its minimumization is that the greatest effect can be obtained by attacking the problem at the state or local level.

The cancer commission of the California Medical Association has been the most successful in meeting the problem of the unorthodox in cancer. It disseminated widely a statement on cancer treatment, and invited any proponent of any treatment for cancer to submit the method with proper documentation, for adequate trials by responsible, impartial investigators—with the understanding that the results of such testing, whether favorable or unfavorable, would become a matter of record. Our cancer co-ordinating committee has embarked on a similar program.

All agencies represented in the cancer co-ordinating committee should be requested to make known funds available to them for the next year, and also an outline of objectives and plans for the ensuing year.

With an interlocking organization, a regulatory function over the statewide cancer control program can be maintained. If all the agencies, as they do in some states, cleared new programs through the cancer co-ordinating committee, a very effective liaison could be maintained. Specifically, the committee would: co-ordinate programs and strength-

(Continued on Page 407)

What Cancer Means to Industry—and Vice Versa

By David M. Reed and
Arthur S. Albright
Detroit, Michigan

QUESTION: *Everyone knows that the economic losses from cancer are startling, Mr. Albright. As a veteran electric utility executive, have you ever translated the figures into terms of your own industrial specialty?*

ANSWER: I certainly have. Only recently, I read that more than 113,000 man-years are lost to industry each twelvemonth from cancer disabilities. In terms of the electric power industry, this represents enough working time to build twenty giant power stations the size of Detroit Edison's St. Clair generating plant, or in other words enough brand new power plants to serve the entire light and power needs of all the 25,000,000 people who live in Michigan, Ohio, and Illinois. The annual man-hour loss from cancer is equivalent to the total amount of time worked by *all of* the employes of a company like Detroit Edison for a period of ten years.

Q.: Facts like these set one to thinking, too, of what the cancer toll means in terms of industrial personnel. What about this?

A.: These facts make me think that of the approximately 12,000 men and women now working at the Edison Company, about 3,000 will have cancer at some time. But the important thing isn't what I think—it's the fact that many of these potential casualties can be and may be saved that's important.

Q.: What about losses to industry in key executives?

A.: In answering this, may I say that my first incentive to join in American Cancer Society work came with the death, a number of years ago, of one of our own key men. He was a distinguished scientist and former university professor who headed the Detroit Edison Research Department. This man was as nearly indispensable and irreplaceable as anyone could be. He was stricken at the height of his productivity. And now, within a relatively few intervening years, other key Edison men have been lost, for example:

The company's vice president in charge of sales.

The controller for the company.

An eminent member of our legal counseling firm.

The vice president in charge of personnel.

Our senior vice president, a man exceptionally distinguished in service to the Detroit community.

The value to an industry of men like these can hardly be assessed. All would have had years of service before them.

Q.: Could you give an estimate on the number of leaders lost annually through cancer in such a company as Detroit Edison?

A.: Yes, by reference to figures furnished by Dr. Lyndle Martin, director of Edison's medical department. The company has about 1,200 employes who are classified as supervisors. Dr. Martin says we can expect six or seven cases of cancer among this group each year. Throughout the company, the rate of occurrence is between sixty and seventy cases a year.

Q.: What does this mean to the company, economically?

A.: The answer to this depends, of course, on the percentage of people actually disabled or lost out of the total number afflicted. Dr. Martin estimates that about half the cases discovered in a year result in total and permanent disability. This is hard to evaluate—but probably would add up to $100,000 or more in time loss and compensation.

Q.: What has been and is being done on the cancer problem in your company?

A.: A great deal, I am happy to say. The

An interview with Arthur S. Albright, Detroit Edison executive vice president, retired.

Mr. Reed is editor of Press Information Services, the Detroit Edison Company.

Mr. Albright has been an active worker in the program of the American Cancer Society for many years, first as a committeeman and director of the Southeastern Michigan organization and later as a representative of the national group. His first interest in the program was aroused by the tragic inroads of cancer among his fellow-executives in the electric power business.

Detroit Edison medical department is one of the oldest and at the same time most modern industrial medical establishments in Southeastern Michigan. The staff has always emphasized "cancer-alertness" as much as possible. Percentage of cases detected reasonably early has been high, I believe, with a resultant good proportion of cures, especially in skin, mouth and stomach types of malignancy. Dr. Martin estimates that about 30 per cent of cases detected are cured through early and adequate treatment.

Q.: Will you please name some of your company activities aimed at cancer control?

A.: Most of these activities, outside of diagnosis and treatment, are educational. Our program, I am glad to report, follows quite closely the educational measures urged by the American Cancer Society.

Q.: Could you tell us some of the specific things Detroit Edison has done?

A.: Yes, for one thing, we have made quite extensive use of posters and bulletins calling attention to the fact that cancer, treated early, is curable. Also, with assorted visual material, we have tried to make employes aware not only of the "seven danger signals," but of the futility of "quack" therapy—treatments other than by x-ray, radium and radio-active isotopes, or surgery. We have shown the American Cancer Society's film, "Breast Self-Examination," to all of our women employes, and have shown other cancer films to various employe groups.

Q.: What other means of education have you used?

A.: One other, in particular, which I think is very important and effective. We have on occasion published cancer information in our company magazine, which goes to every one of our employes and is read with great interest both by employes and their families. We estimate total readership at between 30,000 and 40,000.

Q.: In your conversations with Dr. Martin, Edison's medical director, what conclusions have you drawn as to the biggest problem in cancer education?

A.: My main conclusion is an obvious one with which I am sure Dr. Martin would agree. The biggest obstacle is *fear*—usually grounded in the agonizing experience of losing a dear one to cancer. For many people, the mere mention of cancer darkens the day, dims hopes for the future, dampens the joy of living. This kind of fear, often ingrained in youth, is strong enough to impel retreat from—rather than recognition of—the facts of cancer.

Q.: Is there any way to combat this rather unreasoning fear?

A.: Our medical people seem to think this obstacle is very nearly insurmountable in older persons. But with young people—to whom industry has clear access in its new-employe groups—the picture is much brighter. By establishing cancer-detection procedures as common-place everyday practice, medical people believe they can lead young minds toward regarding the facts of cancer reasonably and accepting the procedures for the routine thing they will some day be. Our own medical staff members believe that there is another advantage besides the mere curbing of fear. Cancer detected in its early stages has excellent prospects for cure. Through educating its employes to the importance of having regular physical examinations and recognizing cancer's danger signals, industry can contribute greatly toward reducing cancer fatalities.

Q.: Fear, then, is the chief obstacle in cancer education, in your opinion. What do you think the biggest problem is in cancer research?

A.: Money. I understand that only about $25,000,000 a year is available in federal and voluntary agency funds for this purpose. This is only $110 per cancer death annually—or something like $36 per known case. This is about *one dollar* per American now alive who will die unless new treatments are found.

Q.: How does this compare with expenditures on other disaeses, and on expenditures for non-essential or luxury commodities?

A.: Very badly. For example, I have read that for the $110 per death we spend on cancer, we spend at least $1,200 per death on infantile paralysis. And for the $25,000,000 spent on cancer research annually, we spend $65,000,000 on ball-point pens, $60,000,000 on lipstick and nail polish, and nearly *four and a half billion dollars* on cigarets.

Q.: How about industry's direct expenditures on research in general. Does any of this work apply to cancer control?

A.: Indeed it does, particularly in the field of atomic studies. Industry is spending astronomical sums in probing the atom's secrets. And much of what is being learned brightens the prospects of conquering cancer. For example, we already have isotopic "tracers"—useful both in diagnosis and treatment. And the radioactive Cobalt 60, discovered in the course of fission studies, is particularly effective in radiological therapy. Industry's expenditures on nuclear research are, and will continue to be, a tremendous source of new knowledge applicable in cancer control. Contacts with nuclear researchers, made by me in the course of my company's nuclear power development activities, have convinced me that the conquest of cancer may well appear through atomic research.

Q.: You have told us much of what your company is doing, Mr. Albright. Could you sum up your recommendations on what U.S. industry in general can do to save its people and to win from cancer the 226,000,000 man-hours that are annually at stake?

A.: In answer to this, and in conclusion, I have five suggestions for individual industries.

1. Realize fully that nowhere near enough money is being spent on cancer, and adjust corporate contributions accordingly.

2. Support any nuclear research that applies economically to your industry. By-product discoveries in such research may conquer cancer.

3. Educate your people and their families through the powerful medium of employe communications and publications.

4. Alert your industrial medical facilities to co-operate in the program of employe education, the scrutiny of suspicious cases, referral of them to physicians or clinics, and adequate follow-up.

5. Get in touch with your nearest American Cancer Society Unit and let it help you arrange an educational program for your employes, utilizing the many excellent tools, such as films, literature, posters and speakers, which are available.

FUNCTIONS OF A STATE CANCER COORDINATING COMMITTEE

(Continued from Page 404)

en relationships among member groups, act as a clearing house for plans and proposals for the programs of the member groups, and agree on the areas of major responsibility for each of the member groups.

In addition, the committee could: help strengthen the ACS and its thousands of volunteers in rural cancer education programs, assist in its persuasion of men over forty-five years of age to have chest x-rays twice a year, assist in teaching the public to have regular physical examinations, help to strengthen and broaden business and industrial programs by enlisting the interest and active participation of labor-management leaders, attempt to bring the ACS cancer education program to every community, strive toward wider utilization of already existing *"tools"* of professional education, expand and improve professional sessions at medical society and American Cancer Society meetings, seek to attain greater visibility of the ACS service program at all levels of operation.

Its influence would further extend to gearing the services offered by the county ACS units down to the local level, standardizing and promoting these services. The committee would also promote the organization of a greater number of tumor clinics, promote at least one annual scientific cancer program at each county medical society, promote cancer educational programs for ancillary medical groups, such as nurses, technologists, dentists and pharmacists, and further studies in the morbidity and mortality of cancer in various parts of the states.

Thus, all the talents, finances, services, and facilities of each agency would be used to insure success of the various phases of the cancer control program originally assigned as the total responsibility of one of the agencies.

Under such a system, the various agencies retain their autonomy with active medical control—realized through the joint agreement of the participants.

With the achievement and realization of this cancer co-ordinating committee reaching into every state, combining effectively the efforts, facilities, and minds of all the great agencies and organizations engaged in this mighty effort, we will surely succeed.

Squamous Cell Carcinoma

Development in the Skin around a Colostomy Sixteen Years after X-Ray Treatment for Carcinoma of the Colon

By E. T. Thieme, M.D.
Ann Arbor, Michigan

THIS case is considered of sufficient interest to report because of the development of squamous cell carcinoma of the skin around a colostomy that had been the site of stasis and chronic sepsis for many years. This carcinoma caused the demise of the patient; therefore, this case offers a warning in the care of colostomies.

Sixteen years earlier, the transverse colon with its adenocarcinoma was exteriorized and then destroyed with x-ray therapy. That a cure of that carcinoma was obtained only indicates that the lesion was still localized to that part of the bowel, and it is of historical interest only. There were several unusual problems in the treatment of this patient that are also worthy of comment.

Case Report

Mrs. M. R. was a fifty-seven-year-old housewife when first admitted to St. Joseph Mercy Hospital, Ann Arbor, June 8, 1936, because of the symptoms compatible with carcinoma of the large bowel. X-rays demonstrated a constricting lesion of the transverse colon. At laparotomy on June 16, 1936, a freely movable lesion of the mid-transverse colon was found with enlarged mesenteric nodes but no distant metastases. A biopsy was reported as adenocarcinoma. The bowel and mesentery were exteriorized, and the abdomen closed. Following recovery from this operation, x-ray therapy was given to the exteriorized bowel to the extent of 3600 r in divided doses of 600 r each. The bowel sloughed away, and the patient was discharged July 6, 1936. She was re-admitted August 8, 1936, and an additional 600 r was given to the colostomy site. She was re-admitted in January, 1937, because of hemorrhage from the colostomy border. This stopped promptly, and the patient was discharged. At that time her colostomy was working well but was noted to be recessed below the skin margin. Despite the pooling of feces around and on her colostomy, the patient was quite satisfied, particularly as her hemorrhoids of twenty years' duration were now quiescent.

She sought no medical advice until October, 1952. At this time she consulted her doctor because of a painful ulceration about her colostomy which had been increasing in size, despite poultices, ointments, and other home remedies, for about one year. Under local anesthesia biopsy was done, which was reported as showing squamous cell carcinoma of the skin. She was re-admitted to St. Joseph Mercy Hospital January 27, 1953, sixteen years after her last admission and sixteen and one-half years after the treatment for adenocarcinoma of the transverse colon.

At this time she appeared as a spry, alert, but very frail woman of seventy-four years. Her physical examination was not remarkable except for the abdominal findings. Just above the umbilicus there was an ulcerated, indurated area 6 by 4 inches. Feces were pooled in this area, and the proximal end of the colostomy could be identified. The liver and spleen were not palpably enlarged, and there was no evidence of ascites. There were no palpable masses and no lymphadenopathy. The chest x-ray was normal. Laboratory work showed a moderate secondary anemia corrected by two 500 cc. blood transfusions.

In considering treatment, wide excision of the abdominal wall and the colostomy site was the primary objective. Re-establishment of bowel continuity seemed logical, but we could find no information in the surgical literature concerning the possible use of a colon defunctionalized for sixteen and one-half years. This problem was easily settled, as the patient would not consider it; she was happy with a colostomy and feared the recurrence of her hemorrhoids. Also, a barium enema demonstrated a patent rectal ampulla, but no barium could be forced into the atrophied sigmoid colon.

Therefore, on January 31, 1953, a wide excision of the abdominal wall and colostomy was done. There was no evidence of metastasis. The right colon was mobilized and placed in the right lower quadrant as a new colostomy. The left colon was closed and dropped into the abdomen. The resulting defect in the abdominal wall measured 9 by 4½ inches. This was closed by the use of a tantalum mesh gauze screen. The liver, gall bladder, duodenum, stomach, large and small bowel lay in direct contact with this. The skin could not be closed over this despite wide undermining until the patient was placed in semi-Fowler's position.

Her postoperative course was quite satisfactory. The head of the bed was gradually let down until she could lie flat. The wound healed without infection, and her colostomy worked well. She was discharged her twelfth postoperative day.

The pathologist reported squamous cell carcinoma, histologically grade II, infiltrating entirely through the

corium and also the mucosa and wall of the large bowel at the colostomy site. The surrounding skin exhibited a moderate degree of perivascular infiltration of plasma cells and lymphocytes.

She returned to the out-patient department October 14, 1953, because of a draining sinus in the left groin centered in a hard mass approximately 2 by 3 inches. A biopsy was done, and the tissue was reported as showing metastatic squamous cell carcinoma. She returned home but failed rapidly, returning to the hospital two months later to die December 29, 1953.

An autopsy was performed, which showed a large ulcerating and infected mass of squamous cell carcinoma in the left groin and left lower abdomen. There was no primary neoplasm in the pelvic organs. The abdominal wound had no residual neoplasm. There was an active duodenal and gastric ulcer as well as terminal bronchopneumonia. The left colon was a rigid tube without lumen, but microscopically all layers were preserved. There was no evidence of damage to the abdominal viscera nor evidence of intestinal obstruction caused by the direct contact with the tantalum mesh.

Discussion

The development of squamous cell carcinoma of the skin about a chronic draining sinus has been reported as occurring in cases of chronic osteomyelitis[1,2] and in a fistula *in ano*[3,4,5] of long standing. We were unable to find a report of such an occurrence about a colostomy.

There are two factors to be considered in the etiology of this skin cancer. One was the use of x-ray to the bowel. Despite protection, the skin must have received an unknown, but perhaps significant, amount of radiation. The development of cancer in skin previously treated or exposed to x-ray is described in all textbooks of dermatology. The skin changes prior to the malignant degeneration are quite typical, the course of events being that of telangiectasis, hyperkeratosis, and atrophy; then malignant degeneration.[5,6,7] These changes were not apparent grossly or microscopically in this case, but were obvious in the case reported by Scott.[8] The second factor was that of chronic stasis and sepsis over a sixteen-year span. This, as in the cases of osteomyelitis and fistulas, would appear to be the more important factor.

Carcinoma arising in a chronic fistula *in ano* probably remains localized for some time and, if treated by adequate surgery, a cure may be expected. However, there are few follow-up studies reported to clarify this point. Carcinoma developing in a chronic sinus of osteomyelitis may rarely metastasize.[7,9] Usually local treatment is sufficient, although here again follow-up studies are inadequate. In this case reported, although the local lesion was eradicated, metastasis from the squamous cell carcinoma developing about a colostomy was the primary factor in the death of the patient. Certainly, as more patients pass the ten year mark after colon surgery for cancer, the possibility of this serious complication of colostomy may be expected to increase. Therefore, such patients must be checked at regular intervals to be sure that their colostomy does not allow pooling of fecal material on the skin and that proper cleanliness is observed. Treatment is primarily that of prevention. However, any established break in the skin must be biopsied promptly and radical surgery done if carcinoma is present in the skin.

This case cannot be reported as a cure of colon cancer by x-ray treatment. In this instance, x-ray was not used in the accepted manner as treatment, but rather as a means of completing an "obstructive resection" by destroying the bowel. A knife or cautery would have achieved the same result as satisfactorily, and certainly more quickly. Such a method of treatment, although successful in this case, has no place in the present treatment of colon cancer.

Several of the problems in the treatment of this case are of interest. Many patients, when faced with the necessity of a permanent colostomy, are greatly disturbed. Yet this patient would not consider the re-establishment of bowel continuity, as she considered her colostomy much less of a problem than the possibility of recurrence of the hemorrhoids. There appears to be no exact information concerning the time a bowel can be defunctionalized and still be used again. In our own experience, the left colon has been successfully used again after five years of disuse. In the case being reported, after sixteen and one-half years, the left colon was a rigid, atrophied tube, but microscopically all layers were intact. Although the rectal ampulla was still patent, it is very doubtful that the colon could have been dilated by enemas or any other means to the extent of being adequate for use. Tantalum mesh gauze has been used frequently to close large defects in the abdominal wall. In this patient, liver, stomach, and large and small bowel were in direct contact with the under surface of the mesh. The result was very satisfactory over this short, eleven-month

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Thyroid Carcinoma Treated with Radioactive Iodine

An Eight-Year Experience

By William H. Beierwaltes, M.D.
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TWO days before Pearl Harbor radioactive iodine was administered to a patient for the first time in the treatment of carcinoma metastatic from the thyroid gland.[1,2] By 1952 more than 250 patients with this disease had been treated with radioactive iodine.[3] In spite of several excellent reports[4-11] on this form of therapy for carcinoma of the thyroid, many questions remain to be answered:

Is radioactive iodine, I^{131}, ever indicated when biopsy of the thyroid reveals the presence of undifferentiated carcinoma? Are the indications for its use more commonly present in youth or in older age groups? Is it worthwhile to perform radical neck dissection for cervical node involvement by thyroid carcinoma if the carcinoma appears to concentrate I^{131}? Now that I^{131} is commonly used, when is x-ray therapy indicated? Should an attempt be made to "cure" the patient with a few large doses of I^{131}, or should smaller palliative doses be given as symptoms or signs prove bothersome to the patient? About what total dose of I^{131} can be expected to exhaust the patient's total body radiation tolerance? Can young women have normal pregnancies after the patient has received large amounts of radioiodine? Have any patients been apparently rendered free of all previously visible metastases by radioiodine therapy?

Obviously, we cannot give a final answer to these questions, but we have critically reviewed our eight-year experience in an attempt to throw light on these and many similar questions before proceeding to treat more patients with cancer of the thyroid with radioiodine.

Material and Methods

When patients were referred to the clinical radioisotope unit for radioiodine, I^{131}, treatment of carcinoma of the thyroid, certain preliminary diagnostic and therapeutic steps were advised. If the patient merely had a nodular goiter that was thought to harbor carcinoma, the referring physician was advised to excise the nodule or nodules with some of the surrounding "normal" tissue and a few cervical lymph nodes, normal or abnormal in appearance, usually Delphian[12] or lateral in location. We urged that thyroid nodules and cervical lymph nodes be sent to the pathologist for immediate frozen section examination, carefully labeled as to original anatomical location.

If the pathologist reported that carcinoma was present in tissue removed from the thyroid gland, bilateral total surgical thyroidectomy was advised. If cervical nodes from one side of the neck were demonstrated to contain thyroid carcinoma and distant metastases were not demonstrated, a radical neck dissection was advised on that side of the neck during the same operation. If carcinoma was demonstrated in cervical lymph nodes from the opposite side of the neck, radical neck dissection was occasionally carried out on that side one and a half to three months later. Total thyroidectomy was advised regardless of the extent or location of metastases in order to prevent death in the future from compression or invasion of the structures in the neck, especially the trachea, esophagus, and tributaries to the superior vena cava; to insure removal of an adequate biopsy specimen; and to decrease the blood level of circulating thyroid hormone so that the pituitary might be encouraged to secrete an increased quantity of thyroid stimulating hormone, TSH, to stimulate metastases to concentrate I^{131} with increased avidity.[13]

The use of x-ray therapy was advised whenever a total thyroidectomy had been carried out with or without a radical neck dissection, and there was reasonable suspicion that thyroid carcinoma still remained in cervical lymphatics but was not

From the Department of Internal Medicine, University Hospital, Ann Arbor, Michigan. The expense of this study was defrayed in part by grants from the Michigan Memorial Phoenix Project and American Cancer Society.

present in other areas of the body. The use of x-ray therapy was also advised in preference to I^{131} in obvious inoperable carcinoma of the thyroid, very rapidly growing, where biopsy revealed small or large cell carcinoma or lymphosarcoma of the thyroid.

After these preliminary considerations the histologic sections were examined carefully for evidence of colloid production by the carcinoma. If colloid (stored thyroid hormone) was found, it was decided that this carcinoma would probably concentrate one of the raw materials necessary to produce thyroid hormone, namely, iodine, or I^{131}. This probability was put to test in all patients by the administration of a tracer dose of I^{131} to the patient followed by external counting over the area suspected of harboring carcinoma. In addition, in many patients autoradiography was carried out on specimens of thyroid carcinoma removed, blood radioiodine levels were determined, and urinary excretion of I^{131} was followed. Normal levels for the basal metabolic rate, serum cholesterol, and serum protein bound iodine, PBI, indicated the presence of functioning carcinoma of the thyroid in patients who had had a total thyroidectomy.

If a patient had had adequate surgical and x-ray therapy and was demonstrated to concentrate I^{131} in thyroid or metastases, he was hospitalized, given his treatment dose of I^{131}, and his urinary excretion was followed to decide when his body content of I^{131} had dropped to less than 30 millicuries so that he could be discharged from the hospital in accordance with Atomic Energy Commission Standards.[14] He was given no medication and was asked to return in three months for a repetition of stereo chest roentgenogram, basal metabolic rate, serum cholesterol, PBI, and I^{131} tracer tests of any residual thyroid carcinoma. If functioning thyroid carcinoma was demonstrated, another dose of I^{131} was given.

This sequence of studies and treatment was repeated until the patient became totally myxedematous and his carcinoma was apparently gone or failed further to concentrate I^{131}. The patient was then given desiccated thyroid until he was clinically euthyroid. He was asked to return every six months from then on, off thyroid for six weeks, for a repetition of the diagnostic studies outlined above. If no carcinoma was found, or found to concentrate I^{131}, the patient resumed his thyroid medication, and, as just outlined, returned every six months for three years, then once a year for two more years, then only at the request of his referring private physician.

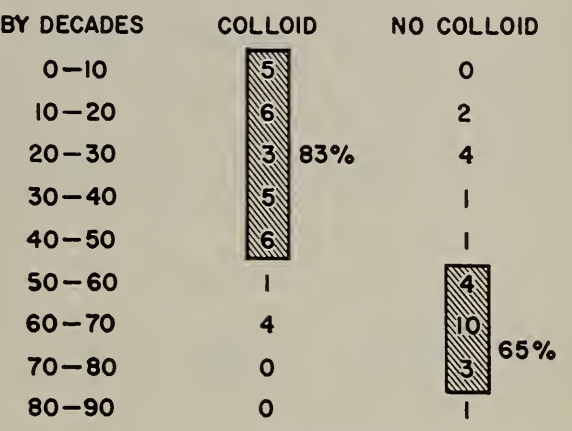


Fig. 1. Age distribution.

During the period extending from 1947 through 1954, fifty-seven patients with carcinoma of the thyroid were given a dose of over 3 millicuries of I^{131} as treatment of thyroid cancer. Each patient was examined by the senior author.

Results and Discussion

Age of Patient and Colloid Production of Carcinoma.—Figure 1 presents the age distribution in decades of the patients treated correlated with the histological morphology of the thyroid cancer reported by our pathologists. Patients with colloid formation in their cancer are grouped under the left-hand column headed "colloid." Our pathologist usually reported the specimens as "adenocarcinoma" or "papillary adenocarcinoma." The patients with colloid-forming carcinoma ranged in age from three to sixty-three years, with an average age of thirty years. Patients with more undifferentiated carcinoma possessing little or no visible colloid ranged in age from fourteen to eighty-six years with an average age of fifty-two years. It is important to note that if colloid formation is a good prognostic sign in the treatment of carcinoma of the thyroid with I^{131}, the majority (83 per cent) of persons in this selected study under age fifty are good candidates for I^{131} and the majority (65 per cent) of persons over age fifty are poor candidates (Fig. 1).

Presenting Symptom.—Thyroid carcinoma in children usually appears with a cervical node

metastasis as the first sign of thyroid cancer ("lateral aberrant thyroid" syndrome).[15] Figure 2 presents data showing that twenty patients or 35 per cent of our total number of carcinoma

Figure 4 presents historical data on the duration of goiter in our patients at the time surgery was carried out at this hospital. Fifty-seven per cent of our patients with goiter were between the ages

	COLLOID				NO COLLOID			
AGE OF PATIENT IN DECADES	RIGHT NECK	LEFT NECK	BILATERAL	AVERAGE DURATION IN MONTHS	RIGHT NECK	LEFT NECK	BILATERAL	AVERAGE DURATION
0–10	2	1	1	18	0	0	0	
10–20	4	0	1	40	0	0	2	21
20–30	2	0	0	72	0	1	0	10
30–40	0	2	0	42				
40–50	1	1	0	11				
50–60	0	1	0	36	0	1	0	12

Fig. 2. Lateral aberrant thyroid syndrome (twenty patients or 35 per cent).

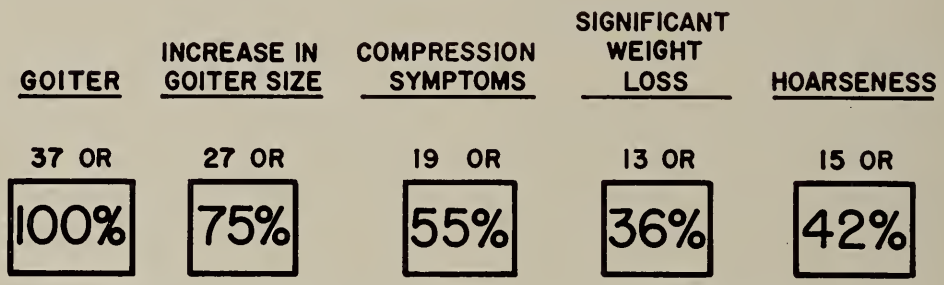


Fig. 3. Symptoms of thyroid cancer other than cervical lymphadenopathy (thirty-seven patients or 65 per cent).

patients treated with I^{131} came to us with the lateral aberrant thyroid syndrome. It is apparent from these data that in our series this syndrome occurred most commonly in young persons with colloid producing carcinoma.

Figure 3 presents the incidence of symptoms compatible with the diagnosis of thyroid cancer, other than cervical lymphadenopathy. In our series, all other patients with thyroid cancer (thirty-seven patients or 65 per cent) eventually developed a goiter. Usually the goiter had been increasing in size and compression symptoms resulted. Of special interest was the fact that a few patients with relatively few grams of thyroid carcinoma lost 10 to 20 pounds of weight without evidence that the weight loss resulted from compression of the esophagus by the carcinoma.

of fifty to eighty years and stated that they had had a goiter. Many of these patients had been advised to have a thyroidectomy fourteen to forty years before the present admission but failed to do so.

Previous Surgery.—It is evident from Figure 5 that all but one patient was subjected to at least a surgical biopsy. It is also evident that the majority of our patients had a total thyroidectomy. Radical neck dissection and total thyroidectomy are being used more commonly in our hospital for treatment of thyroid gland carcinoma because it is becoming ever more evident that even though patients may have slow growing carcinoma of the thyroid for fifteen to thirty years before they get into serious trouble, they nevertheless have carci-

noma that should be treated as energetically as carcinomas arising in other parts of the body. In addition, our surgeons understand that the patients will tend to have a more complete

AGE OF PATIENT IN DECADES	NUMBER OF PATIENTS	
0—10	1	8
10—20	0	–
20—30	5	29
30—40	4	97
40—50	5	42
50—60	3	192
60—70	14	167
70—80	3	484
80—90	1	8

56% OF PATIENTS

Fig. 4. Duration of goiter (in months).

response to I^{131} therapy if bulky masses of carcinoma are removed. Most important, *some of the carcinoma may be well enough differentiated to concentrate* I^{131} *while other metastases may not concentrate* I^{131}. This fact may not become apparent until the surgeon has removed such undifferentiated metastases. It is evident from Figure 6 that using this more aggressive surgical approach, one radical neck dissection resulted in the removal of five nodes, none of which contained carcinoma. This was the only instance of a fruitless dissection and was occasioned by misinterpretation of the results of external counting with a new scintillation tube. All other radical neck dissection proved to be fruitful and consequently we believe, well worthwhile.

Previous X-ray Therapy.—Forty-seven per cent of our fifty-seven patients treated for carcinoma of the thyroid with I^{131} had had previous roentgen ray therapy. Of the remaining 53 per cent who had not had x-ray therapy, 23 per cent had such a high concentration of I^{131} in their metastases that I^{131} was deemed the treatment of choice. The metastases were judged to be too extensive to treat with roentgen therapy in 11 per cent of patients. Twelve per cent of patients were thought to be too young to justify cancericidal doses of x-ray to the cervical region, that might grossly alter skeletal development. Seven per cent of patients were given no x-ray therapy because it was unlikely that lymphatic metastases were present.

Principle Indication for I^{131}.—Sixty per cent of our patients were treated principally because I^{131} uptake studies showed sufficient concentration of I^{131} by the thyroid carcinoma to justify an attempt

	BIOPSY ONLY	SUBTOTAL THYROIDECTOMY	TOTAL THYROIDECTOMY	RADICAL NECK DISSECTION
1947	–	1	–	–
1948	4	3	1	–
1949	1	1	3	2
1950	–	3	2	–
1951	–	3	2	4
1952	0,1	5	7	5
1953	–	5	8	5
1954	–	3	7	2
	12%	42%	53%	32%

Fig. 5. Surgery before I^{131} treatment.

	SIDE DISSECTED		NUMBER OF LYMPHNODES POSITIVE/TOTAL NUMBER REMOVED
	RIGHT	LEFT	
1947	–	–	–
1948	–	–	–
1949	–	2	4/5, 5/30, 4/?
1950	–	–	1-4/? X 3 PATIENTS
1951	2	2	2-3/? X2
1952	3	2	1-4/? X7
1953	3	2	10/15, 1/8, 2/? X2
1954	1	1	2/8, 0/5, 2-4/? X2

Fig. 6. Reported results of cervical lymph node dissection.

to destroy metastases with I^{131} as the procedure of choice. Thirty-six per cent were treated principally to destroy thyroid remnant after an attempted total thyroidectomy. A word of explanation about this latter indication for I^{131} is in order here.

When the surgeon has performed what he considers to be a total thyroidectomy and yet external counting over the thyroid region still reveals concentration of I^{131}, this may be concentrated in residual normal thyroid tissue, residual functioning thyroid cancer, or a combination of cancer in normal thyroid tissue. It seems advisable to administer I^{131} here to complete the job that the surgeon started, namely, a total thyroidectomy for the removal of all normal and cancerous thyroid tissue.

Early in our studies we unfortunately treated

4 per cent of our series of patients principally because surgeon and x-ray therapist refused treatment. This reason is no longer used as a valid indication because it accomplishes no good for

	INITIAL DOSE	TOTAL DOSE
1947	2	185
1948	20	48
1949	57	221
1950	58	147
1951	50	85
1952	84	153
1953	95	114
1954	91	103

Fig. 7. Average dose of I^{131} in millicuries.

showed counts five to ten times higher than counts over control areas. Only one patient showed counts ten to twenty times greater over metastasis than counts over control areas. This patient had a solitary metastasis to the wing of the right ilium.

Average Dose of I^{131}.—Figure 7 shows that over the years the average initial dose of I^{131} has increased from what was undoubtedly a small non-effective dose to a present average initial dose of about 100 millicuries. Average total dose as tabulated here in the right column means little since a patient's total dose, sometimes given over many years, is tabulated in the same year as his initial dose. For example, the average total dose recorded for 1949 was certainly biased by one

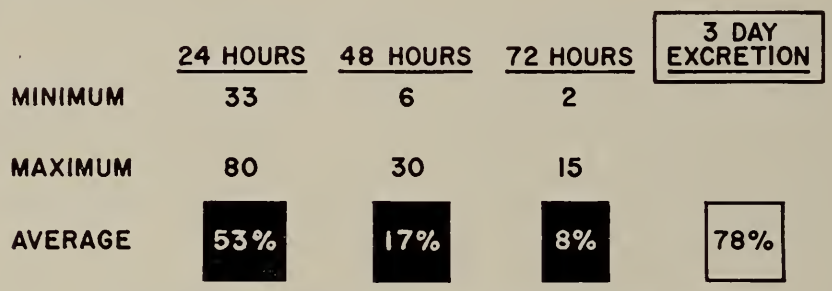


Fig. 8. Per cent of treatment dose excreted in three days.

the patient and gives a poor reputation to the use of I^{131} for the treatment of thyroid carcinoma.

Recorded Uptake of I^{131} *in Metastases by External Counting.*—Counts over a metastasis were compared with similarly performed counts over a comparable position on the opposite side of the body where no metastasis was present. Eleven patients, or 19 per cent, were demonstrated to have a count two to five times greater over cervical node metastases than over a similar "control" anatomy. We could demonstrate I^{131} concentration by lung metastases in only two patients out of six. The counts in these patients were only two to five times greater over metastases than over similar areas where metastases were not visualized. Three other patients with lung metastases in whom cervical node metastases were demonstrated to concentrate I^{131} but the lung metastases showed no significant uptake had marked decrease in apparent size and number of lung metastases as reported by our radiologists after I^{131} treatment. An additional fifteen patients, or 26 per cent, with cervical lymphadenopathy and one patient with metastasis to the scapula

exceptional patient started on treatment that year who is still receiving I^{131} and has received a total dosage of approximately one curie of radioiodine to date. We have seen cervical adenopathy melt away within three weeks after an initial treatment dose of 60 millicuries, and lung metastases totally disappear after two treatment doses totaling 225 millicuries. Others have reported using up to 625 millicuries in a single initial dose in adults and 300 millicuries in children without death but without demonstrable beneficial effect. We rarely give over 60 millicuries as an initial dose in children under age ten years, and rarely over 160 millicuries as an initial dose in adults.

Urinary Excretion After Treatment Dose.—Patients are hospitalized during I^{131} treatment of thyroid carcinoma only because the A.E.C. requires hospitalization[14] for any patient containing more than 30 millicuries of I^{131}. We decide when the patient can be discharged from the hospital by measuring the amount of radioactive iodine collected in each twenty-four-hour urine sample and subtracting this quantity of radioactivity from the amount initially administered to

the patient, with suitable corrections for radioactive decay.

Figure 8 shows that although we observed large variations in the rate of urinary excretion of I^{131} from patient to patient, depending upon the functional capacity of the carcinoma, the average patient given 100 millicuries of I^{131} will be ready for discharge after three days. It was found necessary to carefully instruct the patient to urinate before having a bowel movement because he almost always urinates at this time in the bed pan and the physician then loses track of the quantity of I^{131} passed in this specimen of urine. The patient may then be kept in the hospital for an unnecessarily long period of time. It is important to check further on this possibility by monitoring the patient with a Juno monitor daily. In such an instance the recovered urinary excretion of I^{131} may indicate that the patient still contains much more than 30 millicuries of I^{131}, while the Juno may record a very safe level of less than 7 milliroentgens per hour immediately over the area of highest concentration of radioiodine.

Toxicity from Treatment Dose.—We observed local swelling after I^{131} for carcinoma in cervical lymph nodes remaining in the right neck after a total thyroidectomy in a ten-year-old boy. The boy developed massive swelling of the right side of the neck, extending almost continuously from mandible to clavicle. The swelling was noted about eight hours after an oral dose of 60 millicuries, and disappeared in twenty-four to thirty-six hours. It was not associated with infection, pain, tenderness, heat, leukocytosis or fever. We were glad that the boy had had a total thyroidectomy so that carcinomatous thyroid surrounding trachea had not swelled in this manner and thus obstructed his airway.

Three patients, demonstrated to have significant invasion by carcinoma into trachea, and therapeutic I^{131} concentration in carcinoma, experienced no symptoms of airway obstruction after a treatment dose was administered. Only ten patients complained of nausea and/or vomiting the morning following an afternoon treatment dose. No patients experienced symptoms of hyperthyroidism, such as occurs in the presence of an intact normal thyroid gland, and has been ascribed to the production of an irradiation thyroiditis causing necrosis of follicular walls with resultant dumping of relatively large quantities of stored thyroid hormone into the circulation.

One patient with lung metastases who had had a total removal of left lobe of thyroid gland and a left radical neck dissection developed intense pain and other symptoms of thyroiditis in the region of remaining "normal" right lobe of the thyroid after a 100 millicurie treatment dose of I^{131}. The pain was not relieved by analgesics or cold compresses but was relieved by the administration of 300 mg. of cortisone per day orally. Cortisone has been administered successfully to treat acute non-suppurative thyroiditis,[16] but we have found no previous report of its use in the treatment of irradiation thyroiditis.

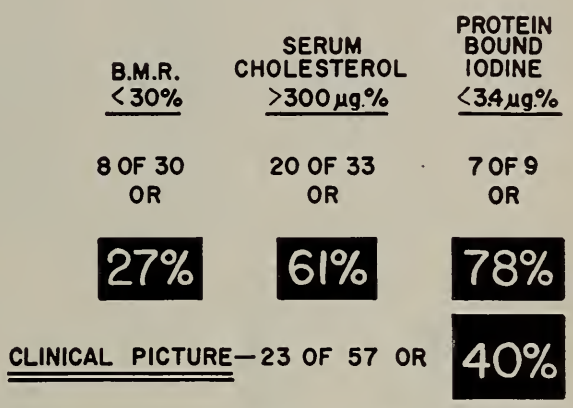


Fig. 9. Incidence of post-treatment hypothyroidism as judged by basal metabolic rate, serum cholesterol and protein bound iodine.

We have observed no instance of suppression of renal function, pancytopenia, or leukemia. One patient with a large cystocele developed hematuria from an irradiation cystitis after each treatment dose of over 100 millicuries. Four patients developed mild anemia and leukopenia with white blood cell counts dropping to as low at 1500 per ml. of blood. No depression of platelet count was evident. It is noteworthy that these four patients all had myxedema at the time of observation of the blood changes and blood values returned to normal when a euthyroid state was produced by the administration of desiccated thyroid.

Post-Treatment Hypothyroidism.—Figure 9 presents figures on the results of our endeavor to determine when we had apparently destroyed all, or almost all, functioning thyroid cancer. When total destruction of thyroid function is produced with I^{131} it is frequently of such short duration when the patient returns for a check up that all

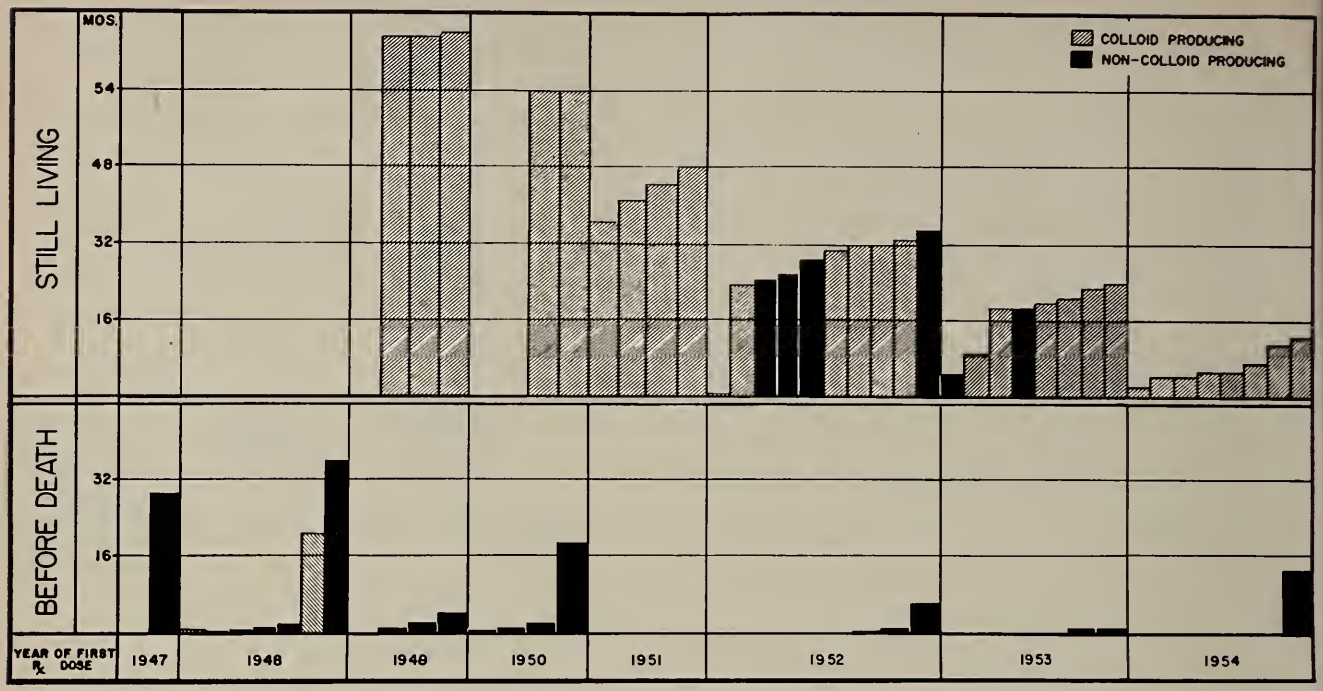


Fig. 10. Duration of known survival in months.

the classical clinical features of myxedema have not yet become manifest. Consequently, myxedema was diagnosed by history and physical examination in only 40 per cent of patients (Fig. 9). The protein-bound iodine falls promptly after the source of thyroid hormone has been destroyed, however, and so it is logical to observe that the protein-bound iodine apparently is the best index to use under these circumstances. Thyroid hormone continues to exert its effect on body cells for some time after the serum PBI falls,[17] and so the basal metabolic rate and serum cholesterol were less reliable, although the serum cholesterol was more reliable than the BMR and is more generally available than the serum PBI.

Pregnancies After I^{131} *Treatment.*—Patients usually ask about the possible effect of a large treatment dose of I^{131} on the gonads. One of our patients inadvertently became pregnant two weeks after receiving 100 millicuries of I^{131} and delivered a normal child 9.5 months after I^{131} administration. Another woman, treated with I^{131} originally for extensive pulmonary metastases, delivered a normal child thirty-six months after the last treatment dose, and after a total dosage of 362 millicuries administered over a two-year period. She has had apparent disappearance of involved cervical lymph nodes and marked clearing of her lung fields.

Survival After Radioiodine.—Figure 10 presents for each patient an individual bar showing survival in months at the time of this review. Patients still living are placed in the upper section of the graph; deceased patients in the lower section. Patients are further grouped according to whether or not their carcinomas obviously formed colloid (cross-hatched bars) or presented no visible colloid (solid black bars). They are further grouped according to the year in which treatment with I^{131} was started. It is evident that originally we used I^{131} as a last resort in patients who were also very poor candidates for I^{131}. These patients are all dead at present. It is also evident that the surviving patients usually had carcinoma that produced colloid although apparent exceptions occurred. Gross has reported that colloid may be produced by a neoplasm in such fine intracellular droplets that it is not evident by conventional techniques. If I^{131} is concentrated significantly by neoplasm, it is probable that the neoplasm produced colloid even though not demonstrable by routine staining techniques.

It should be noted that survival span of our surviving patients is sharply limited by the relatively short period of time that they have been under our observation. And lastly, it should be stressed that even a twenty-year survival does not mean that the thyroid carcinoma patient is cancer-free since we have observed several patients

who were persistently undertreated by modern standards and have been followed for fifteen to thirty years and are still working and suffering from cancer of the thyroid. Others have also reported observations on such patients.[18]

Deaths.—Nineteen of the original fifty-seven patients (33 per cent) are dead. We have autopsy proof that four of these fifty-seven patients died of carcinoma of the thyroid in the University Hospital. The predominant symptoms at the time

	PATIENT AGE AVERAGE IN YEARS	LOCATION OF METASTASES CERVICAL NODES	LUNGS	BONES	AVERAGE SURVIVAL IN MONTHS
PAPILLARY AND ADENOCARCINOMA	34	18	6	2	31
		23 HAD METAST. 3 HAD NONE			
PAPILLARY CYSTADENOCARCINOMA	30	9	3	1	21
		10 HAD METAST. 1 HAD NONE			
MEDULLARY	53	5	3	2	8
		6 HAD METAST. 1 HAD NONE			
HYPERNEPHROID	60	1	—	—	1
SPINDLE CELL	66	1	2	—	2
SQUAMOUS	65	2	2	1	
HÜRTHLE CELL	61	—	—	1	.5
UNDIFFERENTIATED ? THYROID	50	3	1	X	2.5

Fig. 11. Pathology in relation to patient's age, location of metastases, and survival time.

When the pathologist's actual reports are correlated with patient age, location of metastases, and survival of patient (Fig. 11), it is obvious that patients in our series of selected subjects with colloid-forming carcinomas were usually diagnosed as papillary and adenocarcinoma or papillary cystadenocarcinoma, were usually under forty years of age, and to date have enjoyed the longest survival. It is possible that they show a higher per cent of metastases in cervical lymph nodes and lungs. It should be stressed that in our four autopsied patients who died of carcinoma of the thyroid, metastases were never found outside of cervical and mediastinal nodes, lungs, bones, and central nervous system. The "undifferentiated carcinoma thyroid" category at the bottom of Figure 11 refers to three patients who had metastatic carcinoma. Biopsy of thyroid revealed carcinoma in thyroid compatible with origin in thyroid but with insufficient proof that it arose from thyroid. The "x" after this heading refers to the presence of subcutaneous metastases in one such patient.

of death were due to compression or invasion of trachea, esophagus, or tributaries of the superior vena cava in fourteen patients. None of these patients had had a total thyroidectomy. Three of these patients had a classical superior vena caval syndrome. Seven suffered primarily from tracheal compression; four from dysphagia. The remaining five patients not dying primarily from compression or invasion of cervical structures died of myocardial infarction, two patients; complications of paraplegia induced by metastases to spine, one patient; cerebrovascular accident, one patient; and etiology of death unknown, one patient.

Patients Apparently Well.—Sixteen patients who were proven to have carcinoma of the thyroid with metastases that concentrated I^{131} are apparently well. Twelve of these patients had metastases demonstrable only in cervical nodes. Two others had metastases in cervical nodes and also bilaterally in lungs. Two also had invasion of the trachea by carcinoma demonstrated at surgery. These patients are now apparently free

of carcinoma as judged by medical history, by disappearance of cervical nodes to palpation, disappearance of lung metastases to the point that our radiologists have reported a "negative chest" on two or more films, and disappearance of concentration of I^{131} in the region of previously observed functioning metastases. The time interval since the last treatment dose in these patients ranges from one to five years, averaging three years. This experience, we think, justifies a continued attempt to treat patients with soft tissue metastases energetically in an attempt to make them entirely well rather than to merely give palliative doses of I^{131}.

All patients with demonstrated bone metastases on the other hand, continue to have progression of bone lysis, as shown by serial roentgenograms, or continue to concentrate I^{131} in bone lesions that show regrowth of bone roentgenographically. Although none of our seven patients with bone metastases are apparently free of carcinoma, we are treating a new series of such patients more energetically before giving up our hope of trying for more than just palliation even in these subjects. One such patient has been given 1,182 millicuries of I^{131} in ten doses, beginning in 1949. She has developed a persistent mild anemia and leukopenia, suggesting that perhaps the maximum total dosage of I^{131} possible in this patient is between 1 and 2 curies.*

Summary and Conclusions

Fifty-seven patients with carcinoma of the thyroid were given 3 millicuries or more of radioiodine, I^{131} for treatment of carcinoma of the thyroid from September, 1947, through December, 1954. Fifty-three per cent of this *selected* group of patients showed colloid formation in their cancer. These patients averaged thirty years in age. The remaining patients with carcinomas showing little or no obvious colloid formation averaged fifty-two years in age. Eighty-three per cent of patients with colloid forming carcinoma were under fifty years of age. Sixty-five per cent of persons showing no colloid formation in carcinoma were over fifty years of age. Thirty-five per cent of our patients noted cervical adenopathy as the first symptom of carcinoma of the thyroid. All other patients had a goiter. Fifty-seven per cent of our patients with goiter were between the ages of fifty and eighty years and stated that they had had a goiter for fourteen to forty years. All but one of our patients was subjected to at least a surgical biopsy.

Total thyroidectomy was urged for every proven carcinoma of the thyroid to prevent death from compression or invasion of trachea, esophagus, and tributaries of the superior vena cava, to furnish adequate biopsy material, and to prepare the patient for I^{131} therapy of residual metastases. Radical neck dissection was urged when carcinoma was demonstrated in cervical lymph nodes. All feasible surgery was carried out first to insure removal of metastases that might be undiscovered because they were too undifferentiated to concentrate I^{131}. Roentgen ray therapy was used when the goiter consisted of rapidly growing undifferentiated carcinoma of the thyroid or when there was reasonable suspicion that cervical lymph node metastases were not removed surgically.

The principle indications for I^{131} therapy were an external count twenty-four hours after a tracer dose of radioiodine five to twenty times greater over the area of a metastasis than over a comparable area on the opposite side of the body where no metastasis was demonstrable, 60 per cent of patients; to destroy thyroid remnant after attempted total thyroidectomy, 36 per cent; and regretfully because surgeon and x-ray therapist had refused treatment, 4 per cent. Children under ten years of age were rarely given over 60 millicuries as an initial treatment dose; adults seldom more than 160 millicuries.

Toxic symptoms included local transient massive swelling over cervical lymph nodes in one patient, nausea and/or vomiting in ten patients, irradiation cystitis with resultant hematuria in one patient with a cystocele, mild anemia and leukopenia associated with post irradiation myxedema in four patients, and intense pain from an irradiation thyroiditis in one patient. Two patients became pregnant after treatment doses of 100 and 362 millicuries of I^{131}, respectively, and delivered normal children 9.5 months and 36 months after the last dose of I^{131}.

The majority of patients with carcinomas forming no obvious colloid are dead and the majority with colloid forming carcinomas are living and working. One-third of all patients are dead. We have autopsy proof that four of these patients died of carcinoma of the thyroid. The pre-

*Since this manuscript was submitted, two of our patients with bone metastases have returned, apparently free of metastases.

dominant symptoms at the time of death were due to compression or invasion of trachea, esophagus, or tributaries of the superior vena cava in fourteen patients. None of these patients had had a total thyroidectomy.

Sixteen patients who were proven to have carcinoma of the thyroid with metastases that concentrated I^{131} are apparently well. Twelve of these patients had metastases demonstrable only in cervical nodes. Two others had metastases in cervical nodes and also bilaterally in the lungs. None of the seven patients with bone metastases, on the other hand, shows conclusive evidence of being free of metastases even though two have shown some regrowth of bone in their lytic defects.

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SQUAMOUS CELL CARCINOMA

(Continued from Page 409)

period, no evidence of obstruction having developed.

Summary

A case is reported of development of squamous cell carcinoma in the skin around a colostomy. Although x-ray had been used sixteen years before to complete an "obstructive resection" of the bowel, the main factor in the development of the skin cancer was considered to be stasis and secondary infection. Local excision was satisfactory, but the patient died with metastasis.

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Carcinoma of the Adrenal Cortex

Discussion and Report of a Case

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and J. A. Witter, M.D.

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CLINICALLY significant tumors of the adrenal cortex are uncommon, yet they are of great interest on at least two counts: first, because of the insight into normal adrenal function to be derived from the disordered functioning of the adrenal cortical tumor, and second, because of the diagnostic problems presented by the widely variable manifestations of these neoplasms.

A useful clinical classification of adrenal tumors has been presented by Cahill and Melicow.[1]* They classify those arising from the adrenal cortex as follows:

1. Nonhormonal tumors. These give rise to no endocrinopathy but are manifest by local pain and the displacement of adjacent organs, or by distant metastasis.

2. Corticosexual (adrenogenital) syndrome. The clinical picture brought about by tumors in this group depends upon whether the hormone output is predominantly androgenic (usual) or estrogenic (unusual), and upon the age and sex of the patient. In boys an androgenic tumor gives rise to precocious puberty, whereas in girls and women the syndrome of adrenal virilism is produced. This was the situation in the case reported herein. Clinical predominance of estrogenic activity, the corticoestrogenic syndrome, is rare (although paradoxically there frequently is an abnormally high urinary excretion of estrogens associated with virilizing tumors). In males the corticoestrogenic syndrome is characterized by gynecomastia, loss of libido, and smallness of genitalia.[2,3]

3. Corticometabolic (Cushing's) syndrome. These neoplasms elaborate a pathologic amount of the 11-17-oxygenated corticoids, hydrocortisone and cortisone, and bring about the well-known changes of Cushing's syndrome with thin, fragile, striated skin, osteoporosis, tendency to diabetes, hypertension, centripetal fat distribution, tendency to hirsutism and amenorrhea.

4. Combined syndrome. While patients with Cushing's syndrome frequently shown signs of masculinization, patients with adrenal virilism rarely show signs of Cushing's syndrome. However an occasional case will show many symptoms of both syndromes, and to these the term "combined syndrome" has been applied.

Histology

The histologic picture in hormonally functioning tumors of the adrenal cortex may be either that of benign adenoma, or adrenal carcinoma.[4] The latter is very malignant and metastases occur early. The adrenal and renal veins are invaded, and spread takes place both by the blood stream and the lymphatics, the organs most frequently involved being the liver, lungs and brain.

Diagnosis

The diagnosis of tumors of the adrenal gland is based upon demonstration of an abnormal tumor mass or upon detection of its hormonal function. In advanced cases the tumor may be palpable in the flank or may be suspected by downward displacement of the kidney. Pyelograms may be of additional aid in demonstrating displacement of the kidney. Perirenal or presacral air insufflation may, on occasion, be diagnostic. The hormonal effects may be recognized clinically and confirmed by laboratory study. (The well-known approach to the diagnosis of adrenal medullary tumors is beyond the scope of this report.)

Tumors producing adrenal virilism invariably give rise to an increased urinary excretion of 17-ketosteroids. Cushing's syndrome of any origin consistently is associated with an increased excretion of 17-hydroxycorticoids. However, in cases of Cushing's syndrome due to adrenal cortical carcinoma the urinary 17-ketosteroids are elevated as well, whereas adenomas are more often

From Highland Park General Hospital.

*The recently published work of Dr. Jerome W. Conn (J. Mich. State Med. Soc., 55:169-175, 1956) on primary aldosteronism requires the addition to the above classification of adrenal cortical tumors of the adenoma with pathologic elaboration of aldosterone.

associated with a normal 17-ketosteroid excretion. Increased quantities of urinary estrogens may be found in association with tumors producing clinical virilism.[5,6]

The differentiation of adrenal cortical neoplasms from adrenal cortical hyperplasia by means of observations of the level of excretion of urinary 17-ketosteroids before and after the administration of cortisone in doses sufficient to suppress the output of pituitary corticotropin has been studied by a number of investigators recently. This work has been summarized and crystallized by Jailer and co-workers[7] who describe a "cortisone test" for the differentiation of adrenal hyperplasia from adrenal neoplasia. Following administration of suppressive doses of cortisone a significant fall in 17-ketosteroid excretion was obtained in all patients with adrenal virilism secondary to adrenal hyperplasia but not in cases where the virilizing syndrome was caused by a functioning tumor.

In Cushing's syndrome the test cannot be relied upon as fully as in the adrenogenital syndrome, perhaps because the initial level of 17-ketosteroid excretion may not be grossly abnormal in this condition. However a significant reduction in 17-ketosteroid excretion followed administration of cortisone in most cases of Cushing's syndrome due to adrenal hyperplasia, but occurred in none of the cases due to adrenal tumor.

Report of a Case

Because of our opportunity to study extensively the steroid hormone excretion preoperatively and postoperatively, the following case of adrenal cortical carcinoma is reported in detail.

The patient, a fifty-three-year-old housewife, entered the Highland Park General Hospital January 18, 1955, with the chief complaint of pain in the right hypochondrium. The pain had first been noted in August, 1954, at which time it was very severe and associated with temperature elevation to 101°. The attack seemed typical of acute cholecystitis, and she was treated conservatively for this condition by her family physician. The acute pain subsided over a period of two weeks, only to be followed by recurrent episodes of low grade soreness and discomfort in the right upper quadrant of the abdomen.

Prior to admission, general physical examination, routine hematologic study, urinalysis, cholecystograms, barium enema, and sigmoidoscopic examination failed to reveal any specific causative lesion. However, it became apparent some three or four months after the patient's initial symptoms that there was a gradually progressive hirsutism and a lowered pitch of the voice, such that telephone callers on several occasions mistook the patient for her husband. Upon recognition of this virilizing syndrome the patient was hospitalized for further diagnostic study.

The past history was non-contributory. On review of systems a history of recent acneiform eruption about the chest and shoulders was elicited. There had been a gradual weight loss of some 20 pounds in the past six



Fig. 1.

months. The patient had undergone menopause three years previously, and there had been no vaginal bleeding since that time. Physical examination on admission to the hospital revealed the presence of a fairly heavy growth of facial hair which the patient had found it necessary to shave in recent weeks (Fig. 1). There was also a definite increase in hair over the shoulders, arms, and abdomen. The voice was low-pitched. Deep palpation in the right upper quadrant of the abdomen elicited marked tenderness, and there was found a rounded mass which descended below the right costal margin on inspiration. Examination of the external genitalia revealed definite clitoral enlargement. The pelvic examination was negative, as was the remainder of the physical examination. The blood pressure was 140/90.

General laboratory studies including complete blood count, nonprotein nitrogen, fasting blood sugar, blood Kahn, and urinalysis resulted in normal findings. An x-ray of the chest revealed some increase in bronchovascular markings in both lungs. Skull films were negative as were barium studies of the upper and lower gastrointestinal tract. Retrograde pyelograms showed downward displacement of the right renal pelvis, suggesting a large mass at the upper pole of the right kidney. The left kidney was seen to be normal in size, shape and position. The prompt excretion of indigo carmine indicated a satisfactory function of both kidneys.

TABLE I*

	Date	17 Ketosteroids** per 24 hours	Estrogens† per 24 hours
Preoperative	Jan. 23-24, 1955	169 mg.	43 mcg.
	Feb. 1-2	155 mg.	
	Feb. 2-3	149 mg.	
	Feb. 3-4	252 mg.	
Cortisone Test	Feb. 6-7	247 mg.	
	Feb. 7-8	245 mg.	
Postoperative	Mar. 9-10	137 mg.	9 mcg.
	Apr. 30-May 1	91 mg.	10 mcg.

*The 17-ketosteroid and estrogen determinations were carried out in the endocrinology laboratory at Wayne University, College of Medicine, through the generous cooperation of Dr. Robert Leach.

**Normal twenty-four-hour urinary 17-ketosteroid excretion for adult women is 5 to 15 mg.

†Normal twenty-four-hour urinary estrogen excretion (as estradiol benzoate) for women during the years of menstruation is 0.8 to 4.5 micrograms.

A twenty-four-hour urine collection analyzed for 17-ketosteroids, by the method of Drekter et al,[8] revealed a tremendously increased excretion of 169 mg. (normal women, 5 to 15 mg. per twenty-four hours) thus confirming the clinical impression of abnormal androgenic activity.

Diagnosis.—The combination of evidence of a tumor mass at the upper pole of the right kidney, together with clinical and laboratory indication of a virilizing endocrinopathy, suggested the presence of an adrenal cortical neoplasm, either adenoma or carcinoma. Virilizing ovarian tumor appeared to be ruled out by the negative pelvic examination and the positive findings pointing to right suprarenal pathology. Again, adrenal cortical hyperplasia might have been responsible for the adrenogenital syndrome in this case. However, the recent onset of the condition in a middle-aged woman, plus the apparent presence of a tumor argued against this possibility.

Nonetheless it was considered to be of interest to carry out the previously mentioned "cortisone test" for the differentiation of adrenal hyperplasia from adrenal cortical neoplasms. Accordingly, after a series of three twenty-four-hour control collections, the patient was given 50 mg. of cortisone acetate by mouth at six-hour intervals for three days. Starting the second day, two further twenty-four-hour collections were obtained for comparison of 17-ketosteroid excretion prior to and during cortisone administration. The results (shown in Table I) show that the excretion of 17-ketosteroids was not reduced after cortisone, thus confirming the clinical impression of tumor, rather than cortical hyperplasia.

Urinary estrogens, determined according to the method described by Maddock and Nelson,[9] revealed an extremely high level of estrogen excretion as indicated in Table I.

Surgical Treatment.—The diagnosis of right adrenal tumor thus seemed to have been established and the surgical exploration was decided upon. Anesthesia consisted of pentothal with curare supplemented by endotracheal nitrous oxide and oxygen. The patient was placed in a modified left lateral position. An incision was made over the eleventh intercostal space, extending well anteriorly. The eleventh and twelfth ribs were resected. Upon division of Gerota's fascia a large, soft, mottled tumor was immediately apparent. Many dilated veins of large size coursed across its surface. In order to gain adequate exposure the diaphragm was incised and the pleural cavity was opened widely. The tumor

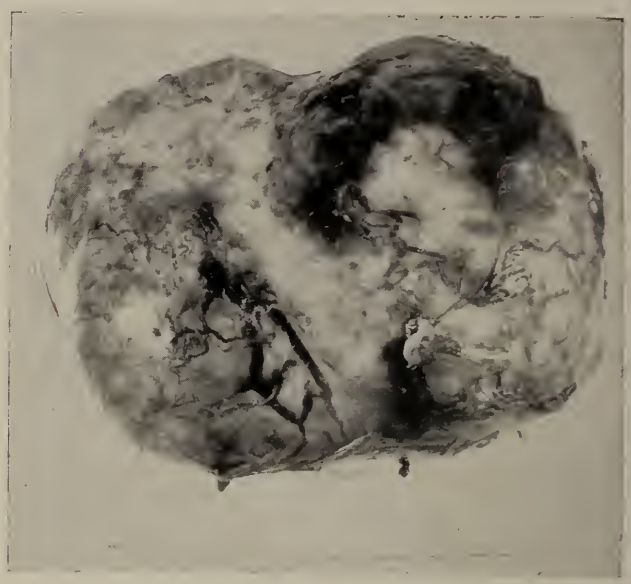


Fig. 2.

was freed by blunt dissection without great difficulty, ligating large veins as encountered. The kidney was displaced downward and was not involved by the tumor. By careful manipulation the tumor was delivered through the wound. The adrenal vein which emptied into the inferior vena cava was huge and when transsected appeared to contain tumor embolus. After delivery of the tumor, careful hemostasis was carried out, the diaphragm was repaired, a thoracostomy tube was inserted through the ninth interspace, and two cigarette drains were placed in the adrenal bed. The wound was closed with interrupted silk technique and the patient was returned to her room in good condition.

Pathology.—The tumor (Fig. 2) removed at operation was large, round and encapsulated, about the size and shape of a small grapefruit, measuring 17 by 12 by 12 cm. The cut surface presented a mottled yellowish-gray appearance with areas of necrosis and hemorrhage.

On microscopic examination the tumor was seen to be composed of proliferating neoplastic cells exhibiting marked pleomorphism and large, hyperchromatic nuclei. Multinucleated cells and cells showing active mitoses were present.

The pathologic diagnosis was carcinoma of the adrenal cortex.

Course.—The immediate postoperative course was uneventful; there was no tendency to hypotension, and fluid and electrolyte balance was maintained without difficulty. (The good operative risk in cases of adrenal virilism as contrasted with the poorer risk in cases pre-

(Continued on Page 432)

Calhoun County Medical Society Central Cancer Registry

A Statistical Analysis

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THE Central Cancer Registry of the Calhoun County (Michigan) Medical Society was established with the aid of the American Cancer Society in March, 1950. The collection of information on cancer illness in Calhoun County was made retroactive to January, 1949. There has been continuous recording of accessions since then. The operation of the Registry has been previously described[1] and need not be repeated here. This report is made to establish a "yardstick" for the measurement of the cancer control problem at a community level and to allow comparison with the data on cancer reported from major medical centers. Since most cancer is treated at a community level this statistical analysis should be significant.

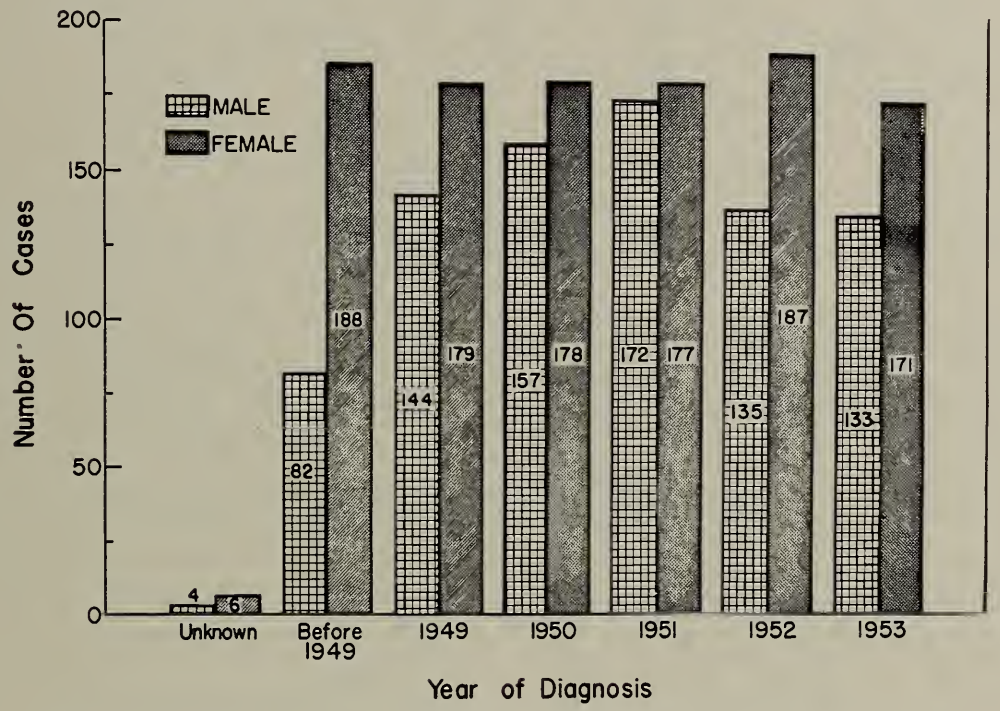


Fig. 1. Cancer cases by year of diagnosis and sex. Calhoun County, registered as of December 31, 1953.

Statistical Analysis

The over-all accomplishment of the registry in terms of annual volume of cases filed, by sex, is presented graphically in Figure 1. Since no planned effort was made to register cases diagnosed prior to 1949, and since the cases reported as diagnosed prior to this date represent incomplete coverage for those years, only the cases known to have been diagnosed during the period 1949-1953 have been considered in the next step of the analysis (Fig. 2). Among the 1,633 cases thus registered, it was found that the 320 nonresident cases represented such a select group with respect to their distribution by sex, age, site, and

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stage of disease, that they could not be included in the general analysis. Then, too, the development of incidence rates for the county could be based on only resident cases; hence, the remainder



Fig. 2. Cancer cases by residence and sex. Calhoun County, 1949-1953.

of this analysis is concerned largely with the 1,313 resident cancer cases diagnosed in Calhoun County during the five-year period, 1949-1953.

These 1,313 cases are categorized by sex and site of disease in Figures 3 and 4. The annual crude incidence rate for all sites of cancer among males in the county was found to be 189 per 100,000 population; for females, 236; and for the sexes combined, 212.* These incidence rates appear low as compared with those from other areas of the United States (Fig. 5). Of course the incidence figures for Detroit,[2] Pittsburgh,[3] and Chicago,[4] are related to totally urban populations, and since it is apparent from national mortality statistics that cancer death rates are somewhat higher in urban than in rural areas, it may be supposed that incidence rates for urban populations are also higher than those for more rural areas. Hence, the incidence rates may be expected to be higher in the three above mentioned urban areas than in the more rural area represented by Calhoun County. However, the incidence rates for Connecticut[5] (78 per cent urban) and for New York State exclusive of New York City[6] (69 per cent urban) are also higher than for Calhoun County (68 per cent urban). Since the Connecticut and New York State figures have been developed from reporting systems which have been in operation since 1936 and 1940, respectively, the differences noted may be due simply to more

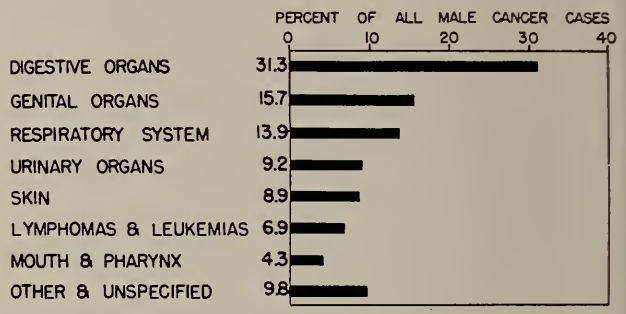


Fig. 3. Resident cases of cancer among males, by site. Calhoun County, 1949-1953.

complete reporting in the latter areas as a result of longer experience in reporting. At any rate, the differences do not appear to be accounted for so much by disproportionate representations of the various sites of cancer as by differences in the age specific rates. The cancer incidence rates are simply higher, age group by age group, in Connecticut and New York State than they are in Calhoun County.

In spite of the aforementioned differences and apparent low incidence rates in Calhoun County, there is reason to believe that these rates may well represent the true cancer morbidity as it actually exists in the county. Evidence for this observation is found in the fact that the ratios between incidence and prevalence rates, and between incidence and mortality rates in Calhoun County compare favorably with those found in other areas of the United States where cancer morbidity has been intensively studied.

One measure of the quality of medical care for cancer patients in any community is the proportion of cases treated on the basis of microscopic confirmation of the disease. That this factor can be improved, as a result of continuous study and efforts aimed at improvement, is amply attested graphically by Figure 6. Figure 7 presents the level of diagnosis by site of disease and points up the specific areas upon which future efforts toward further improvements can be focused.

The relative need or success of a public cancer education program in a community can be measured by the proportion of cancer cases seeking medical care before their disease has advanced to

*Detailed incidence rates by sex, age and site of cancer, as well as other detailed tabular materials for this study, may be obtained from the author(s).

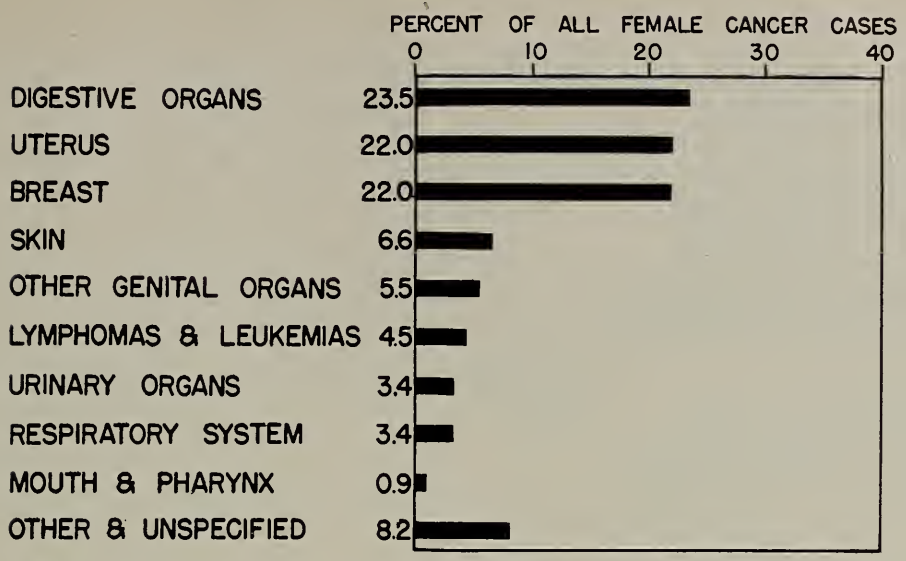


Fig. 4. Resident cases of cancer among females, by site. Calhoun County, 1949-1953.

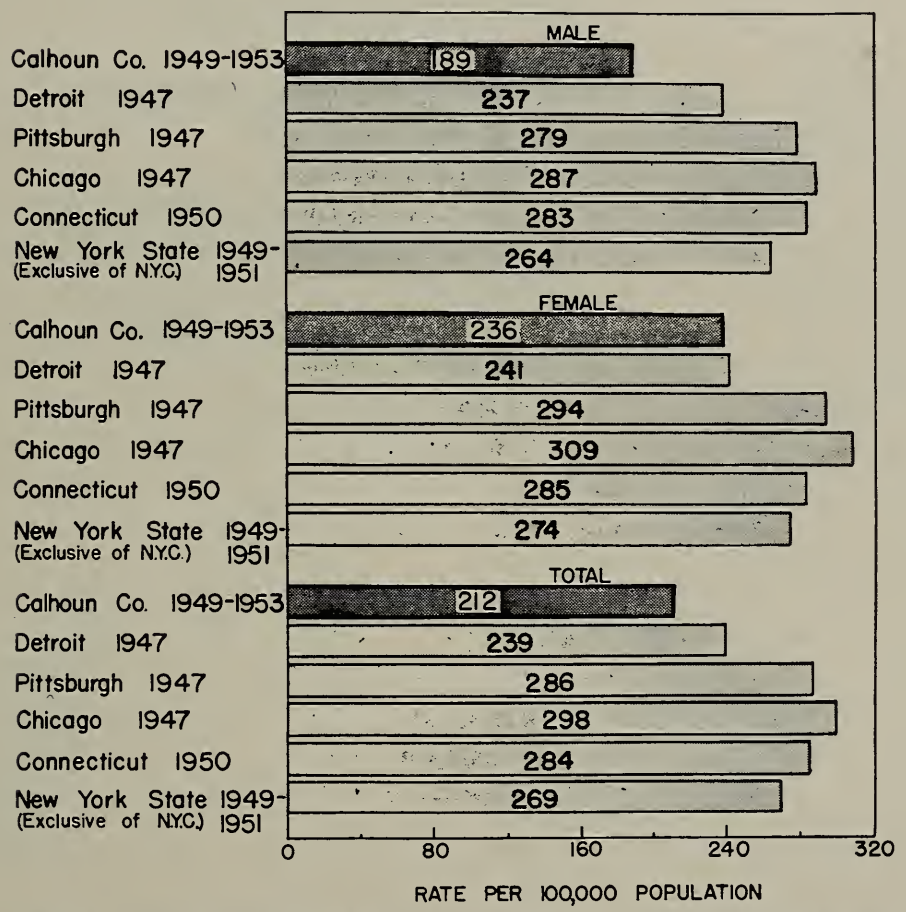


Fig. 5. Annual incidence rates for cancer in Calhoun County as compared with those for other geographic areas.

an incurable stage. Information pertinent to this consideration is presented in Figure 8. Although the group of cases with localized disease at the time of diagnosis showed an increase of 16 percentage points over the five-year period covered in this study, in all fairness it must be noted that 14 of these percentage points were gained through a decrease in the category "stage not specified."

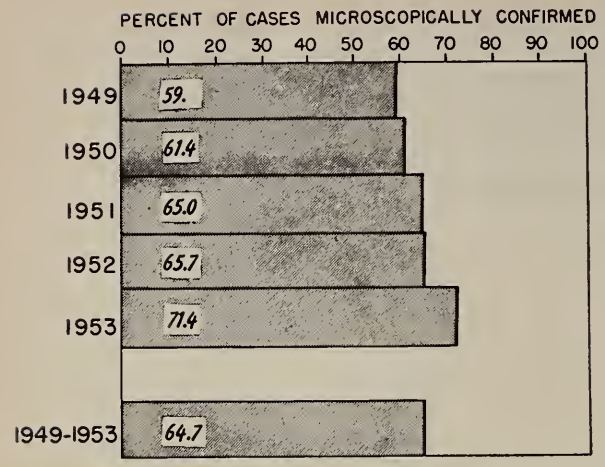


Fig. 6. Per cent of cancer cases microscopically confirmed, by year of diagnosis. Calhoun County residents, 1949-1953.

The hospital experience of the cancer cases covered in this study is presented in Figures 11 and 12. Since hospitalization cannot be considered complete except for the deceased cases, the data are presented separately for deceased and living cases. The proportions of these two groups of cases, by site of cancer, known to have been hospitalized for their disease are shown graphically in Figure 11. The proportion of all cases (both living and dead) for all sites of cancer, known to have been admitted to a hospital is about 79 per cent. It will be noted that for all sites of cancer except skin and the lymphomas and leukemia, the proportion of cases known to have been hospitalized is lower for the deceased than for the living cases. Here it should be pointed out that some

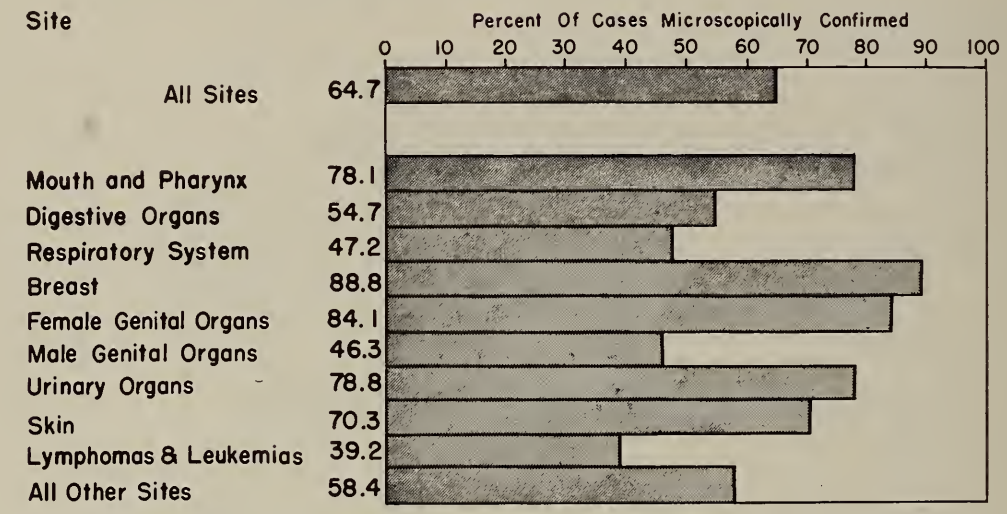


Fig. 7. Per cent of cancer cases microscopically confirmed, by site. Calhoun County residents, 1949-1953.

The delineation of this problem, by site, as depicted in Figure 9, again emphasizes the areas in which future programs in public education might well be concentrated.

The characteristic increase in the incidence rate of cancer with increasing age is demonstrated for this series of cases in Figure 10. It is also noted that, except for the youngest age group (age naught to fourteen, where the male rate is slightly higher than that for the females), the female rates are higher than those for the males at each ten-year age period up to age fifty-five to sixty-four, and beyond this period the male rates are higher than those for the females. The average age at onset of the disease is nearly five and a half years higher for males (63.6 years) than for females (58.2 years).

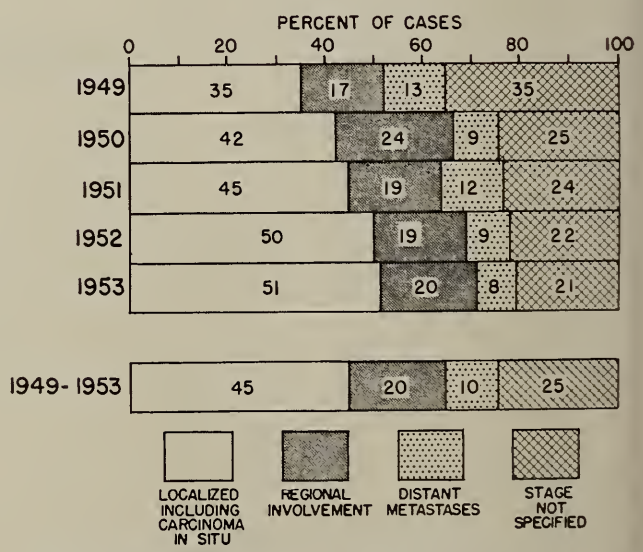


Fig. 8. Stage of cancer at time of diagnosis, by year of diagnosis. Calhoun County residents, 1949-1953.

of the deceased cases on file in the registry were reported by death certificate only, and in many of these cases it was impossible to determine whether or not there had ever been a hospital admission. been hospitalized, by site, are presented in Figure 12.

Beyond all other considerations, the effectiveness of a cancer control program is best summarized

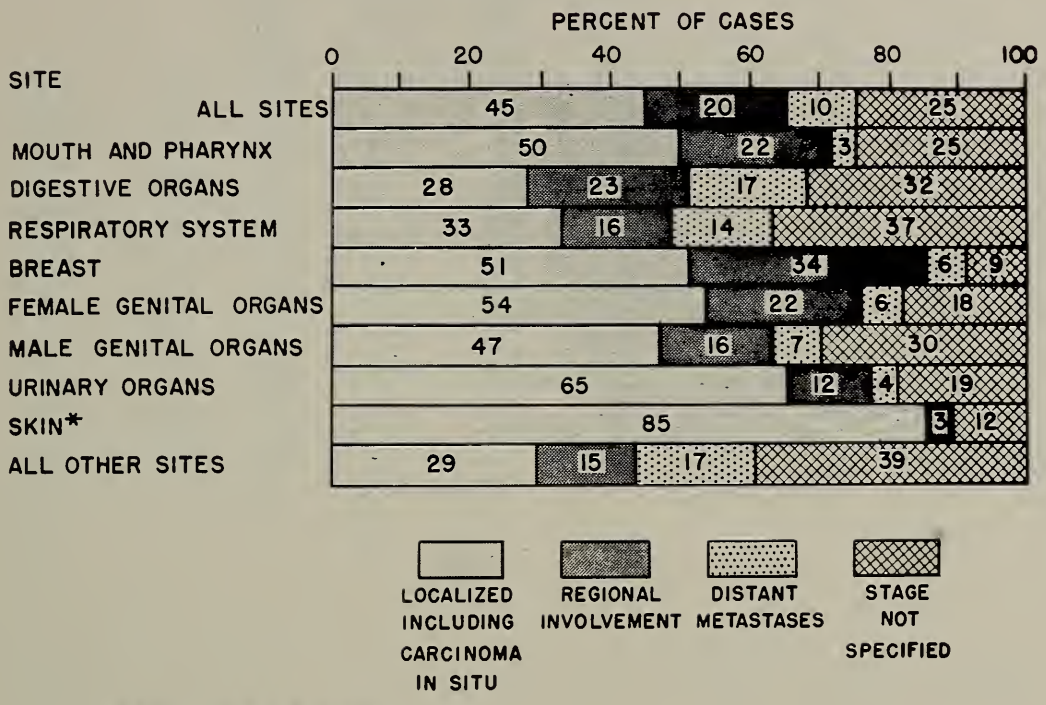


Fig. 9. Stage of cancer at time of diagnosis, by site. Calhoun County residents, 1949-1953.

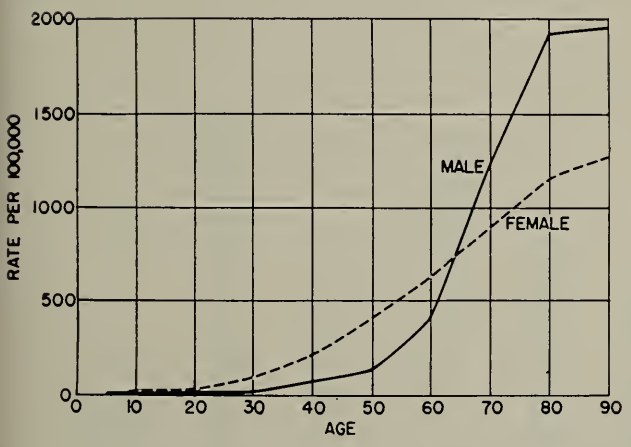


Fig. 10. Cancer incidence rates by age and sex. Residents of Calhoun County, 1949-1953.

Many of these deaths undoubtedly represent cases which would have been reported to the registry if it had been in operation over a period of ten or fifteen years previously; thus they represent a problem which will diminish as the registry grows in point of time. The average number of hospital days for deceased and living cases known to have

in the survival rates among those who have had the disease. The effect of getting more cases diagnosed while the disease is localized (when the probability of cure is highest) merges with improvements in diagnostic and therapeutic techniques to give an index of accomplishment.

Since the present analysis is concerned only with cases diagnosed and followed during the period January 1, 1949, through December 31, 1953, the maximum follow-up theoretically possible for any one case is about five and one-half years. In actual fact, considering the dates of follow-up reports, five years represent the longest period available, and there were not enough cases to warrant the computation of survival rates beyond this period.

Survivorship was computed by an actuarial method in tenths of years, using all resident cases diagnosed during the period 1949-1953 for whom there was adequate follow-up information. Adequate follow-up was obtained on 94 per cent of all resident cases. The actuarial method makes use of every case available at each time interval

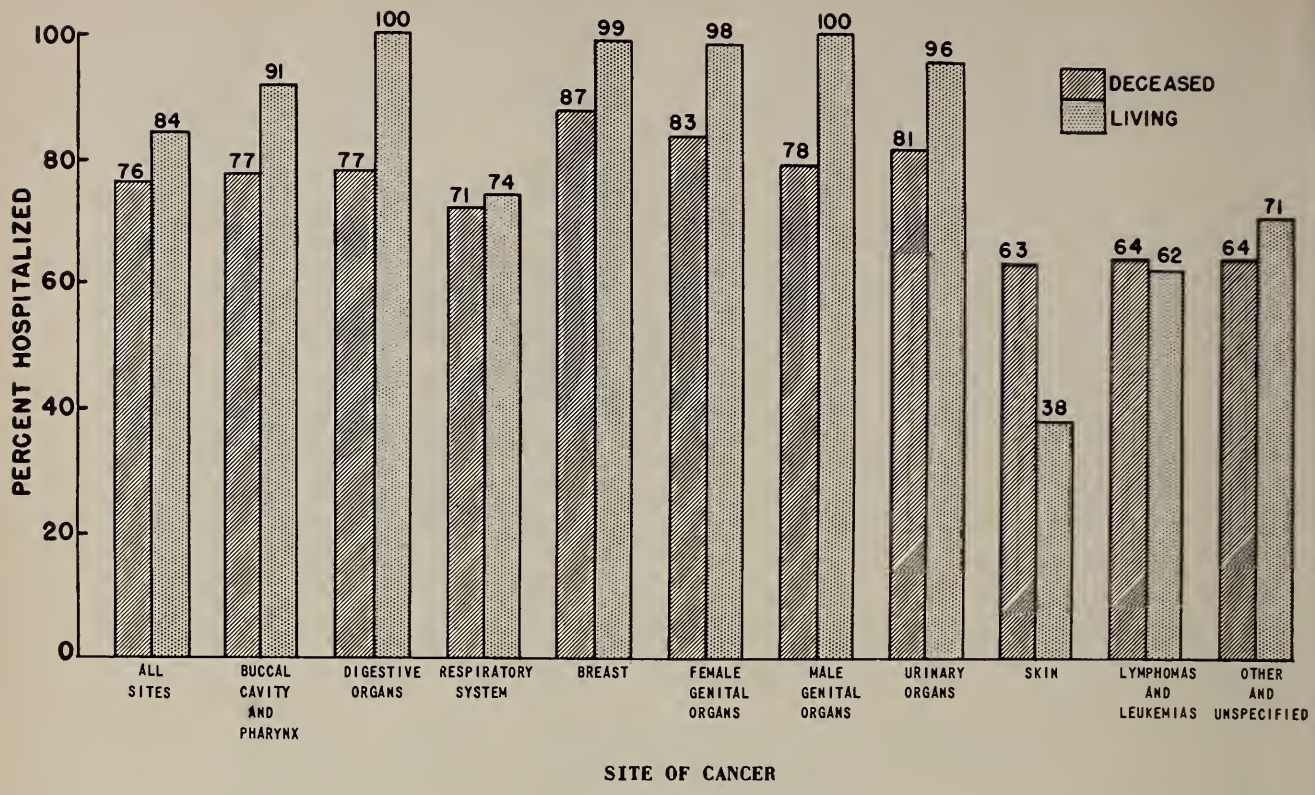


Fig. 11. Per cent of deceased and living resident cancer cases, by site, known to have been admitted to hospital. Calhoun County, 1949-1953.

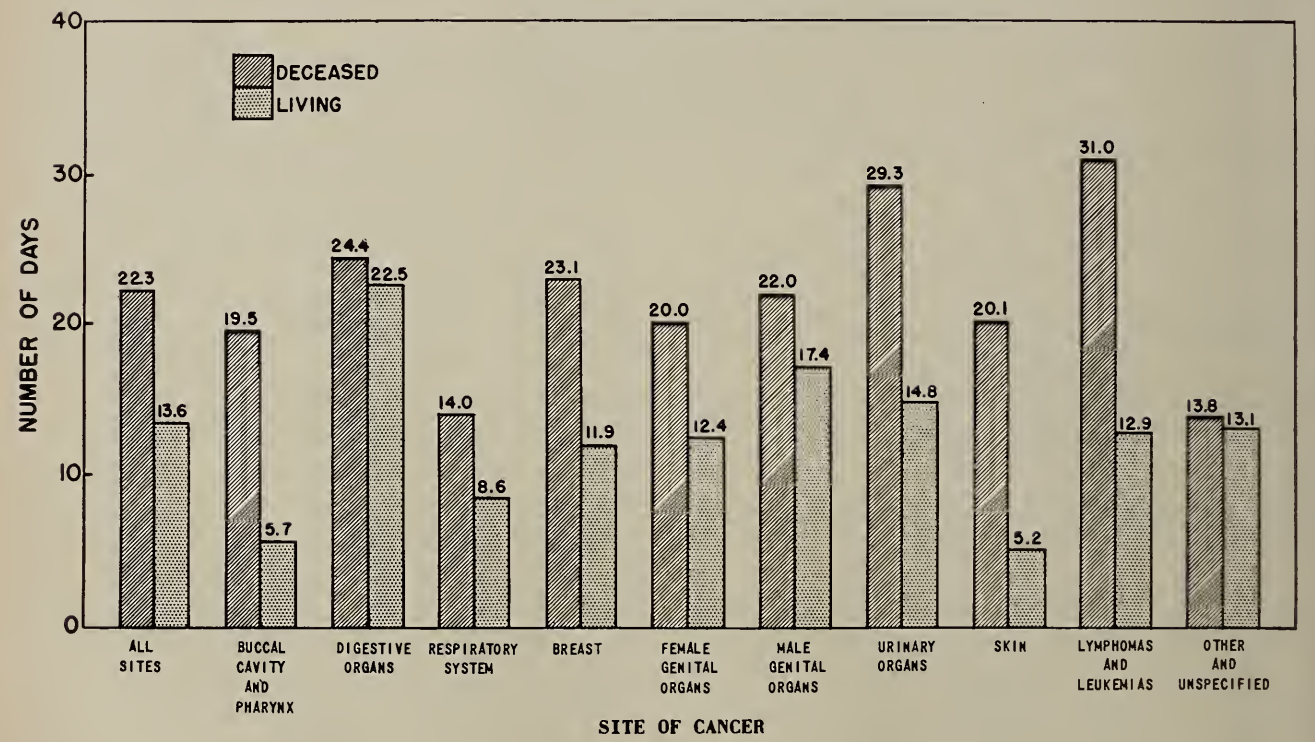


Fig. 12. Average number of hospital days for deceased and living hospitalized resident cancer cases, by site. Calhoun County, 1949-1953.

and subject to the possibility of being either living or dead at that time. For example, for the one-half year survivorship computations, all cases who were in the study a sufficient period of time

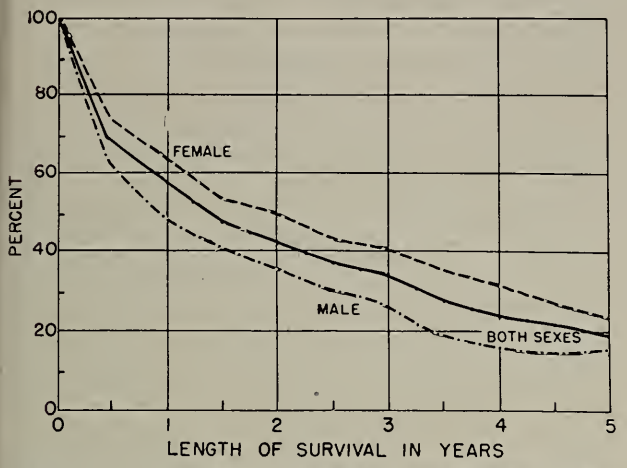
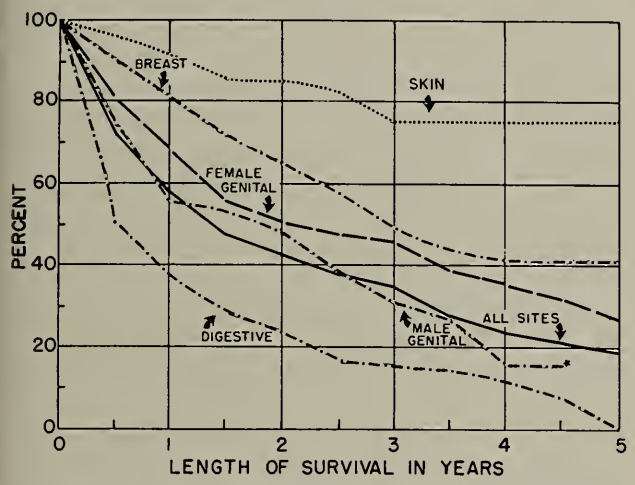


Fig. 13. Survivorship of resident cancer cases, by sex. Calhoun County, 1949-1953.

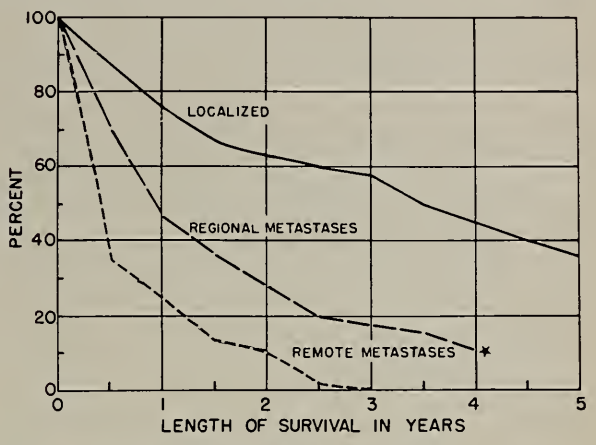


*Insufficient number of cases to compute rate after 4 1/2 years for male genital.

Fig. 15. Survivorship of resident cancer cases, by site. Calhoun County, 1949-1953.

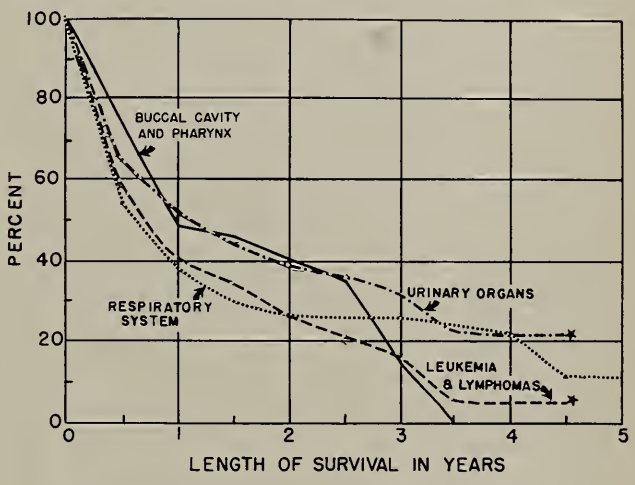
to have had the opportunity of surviving six months were used, irrespective of the date of diagnosis. This means that the number of cases available for the survivorship computations at each successively higher half-year interval was smaller than that for the preceding one, with the net result that the survivorship figures become less reliable as we approach the five-year end of the time scale. After the registry has been in operation for several more years so that it includes a larger number of cases on which a full five-year follow-up can be made, the survivorship figures can be computed by a more direct method and the survivorship curves will represent a more reliable measure of accomplishment than is possible under the present circumstances.

With these reservations in mind, attention is directed to the survivorship performance of this series of patients, by sex, stage, and site of disease,



* Insufficient number of cases to compute rates after this date

Fig. 14. Survivorship of resident cancer cases, by stage. Calhoun County, 1949-1953.



*Insufficient number of cases to compute rate after this date.

Fig. 16. Survivorship of resident cancer cases, by site. Calhoun County, 1949-1953.

as depicted in Figures 13 to 16. For the entire series, irrespective of site, stage, year of diagnosis, microscopic confirmation or treatment, 19 per cent survived five years; the figures for males and females being 16 and 23 per cent, respectively (Fig. 13). The over-all five-year survivorship figure of 19 per cent for Calhoun County may be compared with 19 per cent reported by the British Empire Cancer Campaign for 14,182 cases of primary cancer diagnosed over a period of several years prior to 1940 in several London hospitals.[7] The over-all five-year survivorship for cancer cases diagnosed during the period 1940-1944 in Connecticut was 28 per cent.[8] A study of time trends, to determine whether the survivorship picture in

Calhoun County is improving, cannot be attempted until the registry has been in operation for at least another five years.

The importance of stage for a favorable prognosis in cancer is strikingly indicated by the differences in survivorship according to this factor. Here, the two and one-half year period is the maximum for which survival rates for the three stages can be compared, but it will be noted (Fig. 14) that at that period, 61 per cent of Stage I cases were surviving as compared with 21 and 2 per cent, respectively, for Stage II and Stage III cases. Comparable figures for Connecticut among cases diagnosed in 1942-1946 are, for Stage I, 50 per cent; for Stage II, 31 per cent; and for Stage III, 6 per cent.

The survivorship percentages at half-year intervals up to five years are presented for the broad site categories in Figures 15 and 16. Here it will be noted that the survivorship figures vary from 75 per cent at five years for skin (exclusive of melanoma) to 0 per cent at three and one-half years for the buccal cavity and pharynx. In several site categories there were too few cases to warrant the computation of rates for the full five years.

Comment

Entering its eighth year of operation, the Central Registry now contains over 2,900 case files. Satellite registries established in the hospitals of the county in January, 1955, are beginning to function and are an aid to the collection of data by the Central Registry. Each year we feel we have improved the methods by which we gather information.

Information gathered and stored in case files is of no importance unless it is used. We feel this has been accomplished by reporting our data. Although this is the first statistical analysis to be published there have been two preliminary reports made to the membership of the Calhoun County Medical Society pointing out the areas where improvement could be made in the treatment of cancer. The main areas where we felt improvement was indicated were as follows:

1. *Diagnosis.*—The patient still does not seek the doctor soon enough. This would indicate a need for continued education of the laity. Once the patient reaches the doctor, a careful physical examination aided by the use of the various "scopes" and followed by thorough x-ray diagnostic studies is the only method that is adequate. It appears there should be greater emphasis on x-ray diagnostic studies.

2. *Proof of Diagnosis.*—When it was shown by the preliminary report that in 1949 only 59.8 per cent of cancer cases were microscopically confirmed, greater attention to this point followed and yearly improvement occurred until in 1955 (not reported in this analysis) over 85 per cent of cancer cases were confirmed microscopically. This improvement relates directly to increased interest and action on the part of the individual physician.

3. *Choice of Treatment.*—There is today an increasing ascendancy of excisional surgery over radiation therapy. Our data does not reflect this change. For example, it was quite clear on reviewing the case files on head and neck cancer that excisional surgery was not often enough chosen as the means of definitive treatment, and too much reliance was placed on radiation therapy. A report that points this out to the doctor may influence his judgment in the selection of treatment of future cases.

4. *Follow-up.*—This is an important part in the study of cancer, and one of the hardest to accomplish. Unless the patient is observed from the time of discovery of his illness until his death occurs, proper evaluation of the treatment given cannot be made.

Now that we have established a yardstick for the measurement of the cancer control problem in Calhoun County, we hope to improve our standard of care, and to re-evaluate from time to time the data collected in the Central Registry as it matures.

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Acute Cholecystitis of Childhood

Report of a Case

By James A. Webb, M.D.

Saginaw, Michigan

ACUTE cholecystitis in children continues to be a rare surgical entity. The case reported in this paper is the only proved case on record at Saginaw General Hospital. In infancy congenital abnormality of the biliary system is a usual finding. In early childhood a recent history of upper respiratory infection may often be present.[1] Older children often have associated cholelithiasis as do adults. Why this is true is not clearly understood.

Perhaps the most thorough and comprehensive study of primary cholecystitis in children was published by Ulin in 1952.[2] He reviewed all reported cases up to 1948 and found a total of 475 cases. Of these he considered 326 to be proved cases. He did not accept any case reported on the basis of a non-functioning gall bladder by cholecystography, those secondary to other intra-abdominal disease, or those diagnosed solely by the gross operative finding of a distended gall bladder that would not empty. Since 1948 more than thirty cases of cholecystitis in children have been reported.[3] According to Bonta,[4] the disease has been reported less frequently during the past decade than during the decade from 1930 to 1940.

A case of proved acute cholecystitis is herewith reported in which a preoperative diagnosis of acute appendicitis was made by three physicians who examined the patient prior to surgery.

Case Report

I. M., a seven-year-old Negro boy, was admitted to Saginaw General Hospital, Saginaw, Michigan, with a six-hour history of acute abdominal pain. The patient awoke on February 5, 1955, with severe peri-umbilical pain which grew progressively worse and which gradually shifted to the right upper quadrant. The pain did not radiate to the back or the right shoulder. There was no history of past or recent jaundice. The patient vomited several times, and the vomitus contained no blood or bile. Bowel habits were regular, and the patient passed a normal brown colored stool after the onset of the abdominal pain. There was no history of urinary tract disease nor of anemia.

The past history was significant in that the patient had had a sore throat one week before the present illness associated with slight fever and frontal headaches. This episode had subsided on aspirin therapy alone.

There was no family history of gall-bladder disease, hemolytic disease, tuberculosis, or typhoid fever.

Physical examination revealed a colored male child who complained of acute abdominal pain out of proportion to the objective findings. The temperature was 98.6° F., the pulse rate was 108, and the respiratory rate was 24. Eyes, ears, nose and throat were normal and revealed no evidence of jaundice or dehydration. The lungs were clear to percussion and auscultation. There was marked tenderness and slight guarding in the right upper quadrant unassociated with rebound tenderness. There were no palpable organs, and the bowel sounds were minimal. Rectal examination disclosed no abnormalities.

The white blood count was 16,600 with total neutrophils 86 per cent, lymphocytes 8 per cent, monocytes 5 per cent and eosinophils 1 per cent. Urinalysis was entirely normal. Postoperatively the platelet count was 274,040, the bleeding time was 1 minute, the clotting time was 15 minutes and 34 seconds (Lee White), and there was no evidence of sickle cells.

The attending physician and the surgical consultant agreed on a diagnosis of acute appendicitis, and the patient was operated upon two hours after admission. The abdomen was entered through a Davis incision in the right lower quadrant, and clear yellow fluid was encountered in the peritoneal cavity. The appendix was located and brought into the wound with slight difficulty. The vessels were slightly prominent but the appearance was not that of acute inflammation. Palpation of the gall bladder revealed it to be markedly enlarged and very tense. The appendix was then removed and its stump was inverted. The Davis incision was closed, and the abdomen was then re-entered through a right subcostal incision. The gall bladder was seen to be thin-walled and to have a gangrenous fundus. It contained multiple areas of serosal petechial hemorrhage. The gall bladder was decompressed, and a cholecystectomy was performed. There were no stones palpable in the gall bladder, and the common bile duct was normal. The post-operative course was uneventful except that a Levine tube was necessary to control abdominal distention for twenty-four hours. The patient was discharged on the seventh postoperative day with his wounds well healed and tolerating a general diet.

Microscopic pathologic diagnosis was acute and chronic cholecystitis and normal appendix vermiformis.

From the Department of Surgery, Saginaw General Hospital, Saginaw, Michigan.

Comment

Acute cholecystitis in children is an uncommon disease. The incidence of the disease is very low, but the treatment assumes great importance, epsecially when the diagnosis is made at the operating table. The patient in the case report presented was taken to the operating room with a preoperative diagnosis of acute appendicitis. When the peritoneum was opened, free fluid was found and the appendix had prominent vascular markings. These two findings did not explain the symptoms and the elevated white blood count. Palpatory exploration disclosed the true diagnosis.

Summary

1. A brief discussion of the incidence of acute cholecystitis in children is presented.

2. A case of proved acute cholecystitis in a seven-year-old boy is presented in detail.

3. Comments are made concerning the importance of exploratory laparotomy when the preoperative diagnosis is not unequivocably correct.

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CARCINOMA OF THE ADRENAL CORTEX

(Continued from Page 422)

senting the Cushing's syndrome has been emphasized by Cahill and Melicow.[1] However, a chest x-ray taken ten days following operation showed early but unmistakable evidence of pulmonary metastasis.

The patient was discharged on the eleventh postoperative day, and deep x-ray therapy over the site of the tumor bed and over the lung fields was carried out on an outpatient basis. Improvement was satisfactory over a period of about six weeks although there was no remission in the manifestations of the virilism. Thereafter the patient's course was one of progressive deterioration with increasing cough, dyspnea and weight loss. She was readmitted to the hospital, May 20, 1955, in an attack of very severe dyspnea and expired two days later, fourteen weeks following the operation. Autopsy permission was not granted.

Summary

A case of adrenal cortical carcinoma is presented with a description of its clinical features, the result of extensive study of steroid excretion, and an account of its surgical management. The clinical classification and diagnosis of adrenal cortical neoplasms is discussed, and reference is made to several especially valuable papers from the literature on the subject.

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Surgical Aspects of Ulcerative Colitis

By William S. Carpenter, M.D.
Detroit, Michigan

My remarks will concern only those ulcerative colitis patients considered medical failures, having one or more of the generally accepted indications for surgery as detailed by Dr. Cooper. The most common symptom for which we have been called upon to perform surgery has been simply chronic uncontrollable disease; we have seen fulminating disease less commonly, and questionable perforation or massive hemorrhage only on rare occasion. In every instance the internist has exhausted all medical measures, including in some cases prolonged hospitalization, steroid therapy and occasionally psychotherapy.

Severe chronic skin lesions, emaciation or advanced colon destruction leave little doubt as to the necessity for operation. The recognition that malignant degeneration occurs in 20 to 30 per cent of patients with chronic ulcerative colitis of over ten years' duration has made us more anxious to rid them of the diseased colon. One has only to see a case to realize the seriousness of this possibility. Our first such experience was a twenty-two-year-old boy who was known to have had ulcerative colitis for twelve years. I saw him shortly after he graduated from college. At that time he weighed 85 pounds, had a fever and a lower-left-quadrant mass. At operation the mass was found to be a large carcinoma of the descending colon with metastases. He was dead in less than six weeks.

Once it has been decided that medical measures are not controlling the disease, what surgical treatment is advisable for a patient with chronic ulcerative colitis? Early in our experience we hoped that an ileostomy might allow the colon to heal and continuity to be re-established later. Such has not been the case. For example, a twenty-six-year-old patient of ours had an ileostomy in 1948, and a year later her nutrition was still good. Another year later the diseased area was removed. There was no evidence of healing of the colon. Even more serious is the risk of an asymptomatic carcinoma developing in such a defunctionalized colon.

In about 95 per cent of cases ulcerative colitis begins in the rectum and progresses proximally. We see evidence of this in patients with marked proctoscopic findings of ulcerative colitis but with a normal colon by x-ray examination. If the process continues, the proximal colon and even terminal ileum may show involvement. Thus by the time a patient has definite indications for operation the disease usually will be diffuse, and excision of the entire colon and rectum will be advisable.

At first this surgical treatment was a three-stage procedure—ileostomy followed by colectomy and later abdominoperineal resection. It was soon apparent that ileostomy and colectomy at a single stage was reasonable. This has become the usual procedure in acute as well as chronic disease. Its use in the fulminating disease has been advocated by Crile and others, who have shown that in such cases the mortality is less with colectomy than with ileostomy alone. Its value is based on the realization that the diseased colon, with consequent absorption and marked protein and blood loss, is the source of the lethal factors and that only by removing the colon can the process be quickly halted. The best results will be achieved if the patient can be operated upon early in the fulminating course. Our results have been poor with patients who have been allowed to continue in the fulminating stage for many weeks, usually with the prolonged administration of cortisone in an effort to cause a remission.

More recently we have, in selected cases, performed the entire ileostomy, colectomy and abdominoperineal resection at one operation. Such a one-stage procedure saves considerable time and hospitalization for the patient and removes the discouraging experience of recovering from one major procedure only to look forward to another.

Actually colectomy does not present much of a surgical problem. It is not a difficult procedure, and the mortality is low. Most of our difficulties

Presented at the Michigan Clinical Institute, Detroit, March 9, 10, 11, 1955.

have been in the preparation and care of the ileostomy. Were it not for the necessity of this permanent stoma, there would be much less resistance from patient and physician alike when colectomy is advised. Early in the history of ileostomy the presence of such a stoma was a pretty unbearable situation and made the patient almost as miserable an invalid as his original colitis.

Of the ileostomy complications, which we fortunately see less frequently now, the most annoying is the skin irritation which occurs and remains as long as the ileal content comes in contact with the skin. Ulceration and actual necrosis may occur eventually. This was the usual situation before the advent of proper bags. It is easy to understand the misery this would cause as well as the inability to work or enjoy social activities. The irritated area is painful and tender. Once this has occurred, we have been able to relieve the irritation most rapidly by placing the patient face down on a frame, allowing the discharge to fall away by gravity.

Another problem has been prolapse of the ileostomy. This not only makes proper use of an ileostomy bag difficult but may cause swelling of the loop and make reduction impossible. Circulation may be compromised and resection of the prolapsed loop be necessary.

Another problem has been stenosis of the stoma with obstruction. This occurs not uncommonly early in the postoperative course and occasionally after many months of satisfactory ileostomy function. One of our patients had a total colectomy and ileostomy; after eighteen months of good ileostomy function she began to have cramps, and the ileostomy output ceased. An x-ray showed many dilated fluid-filled and gas-filled loops. It was necessary to make a new ileostomy for this patient, since which she has remained well. It is difficult to understand why this should occur so long postoperatively but we occasionally see it.

A similar and related problem is the retracted ileostomy. Here again the complication comes on many months after the ileostomy has been made and the patient is otherwise doing well. The end of the ileum, especially the mesenteric side, may retract actually below the skin level. This makes proper use of the bag impossible and may allow overgrowth of skin, causing obstruction and infection of the subcutaneous tissues. Such retraction usually necessitates a new ileostomy by intraperitoneal procedure.

Improved technique in preparation and methods of handling the ileostomy have reduced the incidence of complications until today it is acceptable even if not desirable. That it is preferable to colitis is shown by the uniform willingness of our surgical patients to travel to the hospital or home to express their opinion to a stranger considering colectomy. We have made this a standard practice.

We have tried various methods to control these complications. To reduce the incidence of prolapse we use a modification of the method first suggested by Cattell in which an area of the mesentery of the ileal loop forming the ileostomy is sutured to the peritoneal surface of the abdominal wall with nonabsorbable sutures.

We have gone through the trials of short ileostomy and long ileostomy, covering some with split and some with full thickness grafts, each method offering some advantage. Ileostomy revisions, usually for stenosis or partial obstruction, have been disappointingly common and numbered as many as seven in some cases. Most commonly these revisions have been done in the first few postoperative weeks. We are now using the method suggested by Turnbull, in which the serosa is removed from the distal portion of the ileum and the mucosa turned back over the end of the ileostomy and sutured to the skin. This leaves only mucosa in contact with the ileal discharges and has abolished the factor of an edematous thickened ileal serosa in causing early obstruction. It allows immediate application of a bag so that the skin is quickly and continuously protected.

While the surgeon has been interested in improving the technique of ileostomy, the patient has been primarily interested in comfort. Originally he wore pads or dressings to absorb the ileal discharge, with resultant skin irritation. There is no method to avoid irritation if the content drains on the skin. The drainage simply must be collected before it touches the skin.

The most common type of bag is the one which is cemented to the skin much as a tire patch is cemented to a tube. This protects the skin and also provides a container which can be emptied at intervals. In addition to the well-known Rutzen bag, a number of similar bags, including

plastic disposable models, are available. More recently, bags which do not adhere to the skin but depend on pressure to prevent leakage have been devised. Fox and Brush have recently reported excellent results with such a bag. Using the Turnbull method of suturing the mucosa to the skin edge, we can now apply a temporary adherent bag before the patient leaves the operating room, and the skin is never irritated by the discharges. The bag is changed every twenty-four to forty-eight hours, and the patient can apply it himself by the fifth or sixth day.

When the difficulties have been overcome, what end-result can we expect after operation? The patient is anxious to know whether he will be able to eat as he wishes, gain weight and be active physically and socially. We recently contacted twenty-five unselected cases to evaluate the result from several standpoints a year or more after colectomy. Only one patient was uncertain as to whether he was glad he had the operation. All gained weight, ranging from 9 to 94 pounds. With the exception of a few foods which are notoriously troublesome to ileostomy patients, all ate as they wished and did not need extra meals. We have many examples of the good nutrition of these patients after colectomy.

Equally important is their economic and social adjustment to the ileostomy. We inquired into their employability. Two were unemployed before the operation and remained so afterwards. One patient got a less strenuous job. The remainder either continued at the same occupation or changed for some reason other than the ileostomy, sometimes to a more strenuous job. Whereas almost all had lost time from work because of their colitis, the only time lost since operation was due to ileostomy revisions. The occupations for the women included medical technician, switchboard operator, bank teller, and housewife. Male occupations included policemen, welder, tool and die maker, diesel locomotive operator. A previously emaciated boy is now a field man for the Arizona game commission and is outdoors most of the time. The sports and social activities in which the patients were able to participate included dancing, swimming, fishing, horseback riding, bowling, and even water skiing. One patient said the bag interfered with any such activity.

In summary, then, we feel that in selected cases of chronic ulcerative colitis, in which medical treatment fails to control the disease, surgical intervention will effect a cure. In the majority of such cases colectomy and abdominoperineal resection willl be necessary. With the exception of ileostomy complications, which are still more frequent than we would like, the technical problems have been fairly well solved. From a nutritional standpoint these patients are well. With proper handling of the ileostomy they are economically rehabilitated.

DIVIDEND OF EXTRA YEARS OF LIFE

Death is taking a partial holiday in the United States.

Death was a grimly busy agent back in 1900.

If the same death rates prevailed today, there would be:

Five times as many little caskets bearing infants under one year old; twelve times as many for babies one to five.

Four times more funerals each year for adults twenty-five to thirty-four; three times as many for men and women thirty-five to forty-four.

That is one way of expressing the huge dividend of extra years of life won since this century began. The figures come from a survey by the Health Information Foundation.

The death rate, from all causes, per 100,000 people has been chopped nearly in half, the average for all age groups. The greatest area for death's holiday is among babies, but there still are dramatic extensions of life for age groups over fifty-five.

Mortality has been cut 40 per cent among men and women forty-five to fifty-four, and 30 per cent among those fifty-five to sixty-four. It's down 20 per cent for people eighty-five and older.

Despite these gains, Americans' record of preserving health and life is still "not as good as it might be," declares George Bugbee, president of the Health Information Foundation. The foundation is a fact-finding educational organization sponsored by 200 companies in the drug, pharmaceutical, chemical and allied industries. —*B. C. Enquirer and News,* February 19, 1956.

St. Luke's Hospital Clinico-Pathologic Conference

Report of a Case

Edited by Chandler Smith, M.D.
Saginaw, Michigan

THE patient was a white girl, eight years old, who was well until six weeks before entering the hospital. At that time, she unexpectedly vomited some fluid resembling bile on awakening one morning. There was no diarrhea, fever, or other indication of illness. For the next two weeks, vomiting frequently occurred after breakfast, and it gradually became apparent that there was also a moderate loss of appetite. A short time later, vomiting began to occur after all meals. The vomiting was never described as projectile. A physician was consulted, who diagnosed a "nervous stomach" and prescribed a teaspoon of medicine twice daily that made the patient drowsy but did not alleviate the vomiting. Loss of weight became apparent. Radiographic examination of the upper gastrointestinal tract revealed no abnormalities.

Ten days before entering the hospital, the patient suddenly awoke in the middle of the night, screaming with pain in both ears. The pain subsided, the child remained awake for two hours, and vomiting recurred. Sharp intermittent pain in the ears increased in frequency and severity, and examination was not revealing. On the day before admission to the hospital, the patient would stop suddenly, clasp her hands to the sides of her head, and scream with pain. That evening, while watching television, blurring of vision in the right eye was first noted. There had been moderate dizziness during the past two weeks. A weight loss of 18 pounds had occurred during the past six weeks. There had been no staggering gait, ataxia, diplopia, paralyses, paresthesias, or impairment of hearing. The patient was well orientated as to time, place, and person. The memory was unimpaired.

The temperature was 99.6 degrees (F), respirations 16, pulse 88, and blood pressure 110/70 mm. Hg. Physical examination revealed a well-developed female child who did not appear to be in any acute distress. The head was of normal configuration. The pupils were round and equal, and reactions to light and accommodation were normal. The fundi disclosed physiologic optic discs, and no petechiae or "exudates" were seen. Extraocular muscle function was intact. The external auditory canals and tympanic membranes appeared normal. The nose, mouth, and neck were not remarkable. Examination of the heart and lungs revealed no abnormalities. The abdomen was soft and nontender. The extremities were symmetrical and well formed. The deep tendon reflexes were active, equal, and physiologic. The superficial abdominal reflexes were similar. A positive Babinski reflex was not elicited.

The urine was yellow, cloudy, alkaline, and of specific gravity 1.017. The first urinalysis revealed acetone, diacetic acid, and a reducing substance. These were not again identified and the sediment was normal on all examinations. Hematologic examination revealed 14.4 grams of hemoglobin per 100 cc. There were 5,600,000 erythrocytes and 8,300 leukocytes per cu. mm. Differential count of 100 cells revealed 55 segmented granulocytes, 2 band cells, 41 lymphocytes and 2 eosinophils. The Kahn serologic test for syphilis was negative. The fasting blood sugar was 104 mg. and the nonprotein nitrogen was 38 mg. per 100 cc. Sensitivity was tested to thirty-six pollens and 135 proteins. Seven of the former and fourteen of the latter were positive, with spinach, mustard and oyster showing the widest reactions. An electroencephalogram was interpreted as revealing a paroxysmally abnormal, grand mal type of disorder with asymmetry but no localization.

During the hospital course the patient continued to experience pain in her ears and there was occasional vomiting. On the eighth hospital day, blurring of the margins of the optic disc of the left eye was first noted. A lumbar puncture was then performed and the spinal fluid was found to be under increased pressure. The spinal fluid revealed 61 mg. of protein, 700 mg. of chloride, and 69 mg. of sugar per 100 cc. The left patellar reflex was then found to be weak, and the neurologic examination was otherwise unchanged. Later that day the child was found to be unconscious and the respiratory effort was slight. The patient existed in a respirator for the next two days and during this period, the only sign of life was a faint heart beat. The patient died after ten days in the hospital.

Clinical Discussion

Dr. R. M. Heavenrich.—This record describes an eight-year-old child who develops persistent vomiting, manifests signs of increased intracranial pressure, and dies of an illness of about seven weeks' duration. With this information alone, the diagnosis may be approached in a speculative way according to the statistics regarding the causes of death in children. It is known that about 40 per cent of deaths in children are the result of injuries. In some 10 to 12 per cent, death is due to malignant tumors. Before the age of four years these are often of renal origin or of congenital nature such as the teratomas. After four years, tumors of the eye, brain, and lymphatic system predominate. In this record there is no mention of trauma or lesions of the eye or lymph nodes. However, increased intracranial pressure is suggestive of a tumor of the brain, and in this way such a diagnosis becomes a probability. In children, brain tumors occupy the posterior cranial fossa in about two-thirds of cases. Expansion in this region gradually compresses the fourth ventricle. As this occurs, ventricular pressure rises and internal hydrocephalus becomes pronounced. The clinical signs of increased intracranial pressure include vomiting, blurring of vision, headache

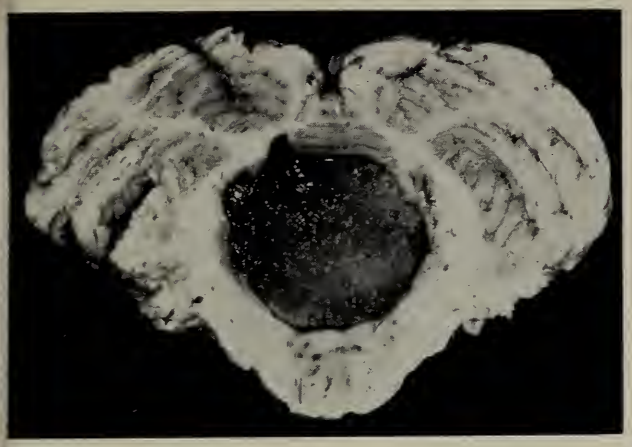


Fig. 1. Medulloblastoma of vermis cerebellum.

and papilledema. All of these signs were manifested by this patient.

Much information is lacking in this record. It would be most helpful to know the pressure of the spinal fluid, the cell count, and whether or not a culture was taken. There is no mention of visual field examination, cranial nerve function, or signs referable to lesions of the cerebellum. There is no record of x-rays of the head or chest or of tuberculin skin testing. Nevertheless, the evidence at hand is most suggestive of an infratentorial tumor of the brain. The most common of these in children are astrocytomas and medulloblastomas. In addition, ependymomas often arise in the fourth ventricle and block that chamber so that internal hydrocephalus of abrupt onset results. However, ependymomas are less common than the tumors mentioned. Of these, my diagnosis is astrocytoma of the cerebellum.

Dr. A. W. Farley, Jr.—I want to emphasize the clinical features that are suggestive of medulloblastoma. This tumor arises in the vermis of the cerebellum and is a midline lesion. Tumor cells are often swept away from the margins to float in the spinal fluid, and may be identified by examination of the centrifuged sediment of the spinal fluid. Because of this midline position, signs of dysfunction are usually symmetrical. Also for this reason, the electro-encephalogram cannot be expected to provide localizing signs. However, in brain tumors that are apart from the midline, the electro-encephalogram often provides data that permits localization of the lesion. The rapidity of growth and the absence of localizing signs suggest to me that the diagnosis of medulloblastoma deserves careful consideration.

Visitor.—It seems to me that this is not necessarily a tumor of the brain. The recurrent pain, the surprising clinical state of well-being and the short duration of the illness are suggestive of an enlarging aneurysm of the circle of Willis. The pain is a reflection of the pressure of the aneurysm on the cerebral tissue with tearing and hemorrhage of the wall. Death is sudden as the rupture occurs. When rupture occurs into cerebral tissue, I do not believe that blood is necessarily found in the spinal fluid. Therefore, even though such aneurysms are quite rare in children, I suggest this diagnosis.

Dr. Farley.—I am doubtful that rupture of an aneurysm of the circle of Willis is ever unaccompanied by the finding of blood in the spinal fluid.

Clinical Diagnosis of Dr. Heavenrich

Astrocytoma of cerebellum.

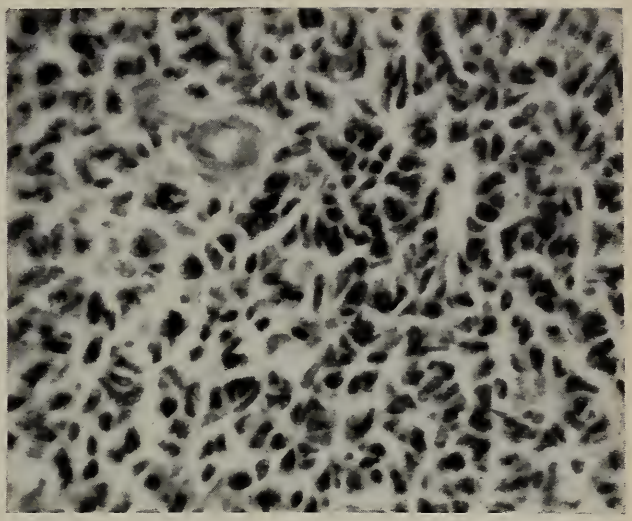


Fig. 2. Microscopic appearance of medulloblastoma.

Anatomic Diagnoses

Medulloblastoma of cerebellum.

Bronchopneumonia of right and left lungs.

Dr. J. C. Smith.—Autopsy examination revealed a medulloblastoma of the vermis of the cerebellum (Fig. 1). The fourth ventricle was occluded and moderate internal hydrocephalus was present. Histologic examination revealed the deeply basophilic nuclei and the uniformly small tumor cells characteristic of medulloblastoma (Fig. 2). Tumor cell implants were not identified either within the brain or over the external surfaces of the brain or spinal cord. Death was attributed to this tumor and to bronchopneumonia of both lungs.

In a study of 427 cases of brain tumors in children, Craig, Keith and Kernohan[1] found that 65.8 per cent were located in the posterior cranial fossa below the cerebellar tent. Of these, the distribution according to type included astrocytomas, 30.3 per cent; medulloblastomas, 24.9 per cent; and ependymomas, 12.5 per cent. Astrocytomas arise in one lateral cerebellar hemisphere, enlarge slowly, produce asymmetric ataxia, and are amenable to cure by surgical resection. Medulloblastomas arise in the midline cerebeller vermis, enlarge rapidly, cause symmetrical ataxia, and are incurable. However, the medulloblastoma is amenable to radiation therapy. Death usually occurs in twelve to fourteen months after the onset. Diagnosis may be secured by the identification of tumor cells in the centrifuged sediment of the spinal fluid. Ependymomas occur most often in young adults, and only about half of these tumors arise in the posterior fossa. In a series of 126 ependymomas, Craig, Keith, and Kernohan[1] found seventy-five to arise in the posterior fossa, and all but eight of these arose from the roof of the fourth ventricle in the midline. Because of this location, the clinical manifestations are principally those of internal hydrocephalus, rather than those of cerebellar dysfunction. In this way, the site of origin, rate of enlargement and involvement of adjacent structures are reflected in clinical patterns that permit accuracy of diagnosis.

Reference

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New Tuberculin Testing Material

Suggested Uses

By Raymond Hofstra, M.D., and
John A. Cowan, M.D.
Lansing, Michigan

THE Michigan Department of Health recently has prepared and is distributing the one-test dose material for the determination of the tuberculin reaction. This product is a dilution of Old Tuberculin, 0.1 cc. of which is equivalent to 0.00005 cc. of the U. S. Reference O.T. (approximately 1:2000) and 0.1 cc. is approximately equivalent to 0.0001 mg. PPD-S or 5 tuberculin units of PPD-S. This has been demonstrated by Furcolow to elicit reactions in most persons with active tuberculosis.[1] This dose has been found to be suitable for separating the infected from the uninfected in children as well as adults.[2]

When injected *intradermally,* the one-test tuberculin will result in a reaction in those persons harboring the tubercle bacilli, without any appreciable number of false reactions. Correctly used, the tuberculin test is one of the most specific and trustworthy devices in the detection of tuberculosis. With few exceptions, the test will result in a clearly defined reaction among those who have tubercle bacilli in their bodies.

The reliability of the test makes it possible to screen out those individuals who are actual or potential victims of tuberculosis. While the test does not reveal the site of the disease in the body, its activity or its extent, it achieves three important results:

1. The tuberculin test is effective in diagnosis and is necessary in the differential diagnosis of pulmonary diseases. Even though a person may have symptoms pointing toward tuberculous disease, if he has a negative reaction to this test, it is a good indication that some other condition may be causing the illness. Exceptions are seen in the early acutely ill and in the terminal case.

As previously stated, positive reaction indicates a sensitivity to the tuberculo proteins produced by the bacilli in the body. In most cases these bacilli are in a dormant state. For diagnostic purposes, a positive reaction indicates that tuberculosis may be the underlying cause of the illness and if symptoms and findings warrant, further studies (sputa, gastric washings and x-ray) should be carried out. The diagnostic value of a positive reaction in a person who has previously been negative is increased particularly when a known case of tuberculosis has been a contact of the positive reactor.

2. The test has significant value in the epidemiology of tuberculosis. The tuberculin test is often the first step in finding previously unsuspected cases of tuberculosis, and many times serves as a productive starting point for tracing contacts and determining the source of the infection. This is particularly true in the pre-school and school child, in whom a reaction to the tuberculin test can be more easily traced to its source because of the relatively small number of people closely associated with the child. One example of this use of the test occurred in a southern Michigan county, where tuberculin testing was the first device used in an epidemiologic program which resulted in the hospitalization of sixteen persons with active tuberculosis.

3. The test is valuable as a method to obtain information on the status of tuberculosis control in any given community or area. Through wide use of the test, the relative rate of tuberculosis infection can be measured, indicating both the general trend of the infection rate and the specific age brackets or other groups in which tuberculosis is present. From the number of new positive reactors an indication can be obtained of the presence of open active cases in need of isolation and treatment. This epidemiological information also assists in selecting the population groups which need the most intensive screening.

As the incidence of tuberculosis decreases, the value of the tuberculin test increases in relation to the major uses listed previously. It is expected that the tuberculin test will always remain as a diagnostic tool—eventually the most efficient tool to measure the status of tuberculosis control.

(References on Page 444)

Dr. Hofstra is Tuberculosis Control Officer, Division of Tuberculosis and Adult Health, and Dr. Cowan is Director, Division of Tuberculosis and Adult Health, Michigan Department of Health.

Rheumatic Fever Prophylaxis

By the Rheumatic Fever Committee
Michigan State Medical Society

THE Michigan Crippled Children Commission in co-operation with the Michigan Department of Health has instituted a program of penicillin prophylaxis for the prevention of streptococcal infections in children who have previously had rheumatic fever to reduce the recurrence rate of rheumatic fever in Michigan. The effective date was January 16, 1956, and a section of the office of the Crippled Children Commission has been created with Robert E. Fisher, M.D., as medical co-ordinator.

The basic program of prophylaxis began in Michigan in 1943, when Carleton Dean, M.D., director, Michigan Crippled Children Commission, interested the commission in the establishment of a developmental program in eight contiguous counties in the Upper Peninsula with headquarters at Marquette. Sulfadiazine has been administered continuously in that area to children who have had rheumatic fever (except in fifteen to twenty selected cases who have been given Bicillin® since 1953), and those counties will not participate in the new program at the present time. This was the first large-scale attempt to carry out a prophylaxis program in a rural area, and it served as a model for other programs throughout the state and nation.

By 1950, it had become generally recognized that sulfadiazine prophylaxis of streptococcal infections was effective, safe, and economically feasible. The difficulty of maintaining close supervision of the patient, emergence of resistant strains, and failure of patients to take the medication continuously were admittedly limitations, but the large oral doses (twelve million units a month) of penicillin and many injections of procaine penicillin G with 2 per cent aluminum monostearate which were required led to the recommendation, in 1953, that sulfadiazine was the method of choice. The previous year a new repository penicillin had become available; a double salt, dibenzylethylenediamine dipencillin G, referred to as DBED in the earlier papers, and benzathine penicillin G currently. Stollerman found that measurable penicillin blood levels were present in a high percentage of cases twenty-eight days after intramuscular injection of 1,200,000 units of Bicillin,® and he began to administer it to his patients as a prophylactic measure, and it was at this time that the small pilot study in the Upper Peninsula was begun. By late 1954, several papers had appeared substantiating the observation that 1,200,000 units of benzathine penicillin G monthly was more effective than procaine penicillin G—aluminum monostearate in decreasing the number of throat cultures containing hemolytic streptococci.

In February, 1955, the statement that rheumatic fever could be prevented was published in *Circulation,* vol 11, the basis of which was that irregular injection and inadequate physician supervision could be avoided by monthly injection of benzathine penicillin G. In view of this fact, Doctor Dean discussed the matter with the Michigan Crippled Children Commission to ascertain its views in supporting a large-scale prophylactic program, and, upon its approval, contacted the Rheumatic Fever Control Committee of the Michigan State Medical Society, and through them, The Council, Michigan State Medical Society. The program was enthusiastically approved, it being felt that the method was of sufficient merit and safety to warrant its general use. Although the literature indicates that some of the patients complain of discomfort at the site of injection lasting twenty-four to forty-eight hours, this was not observed in the pilot study, and there have been no reactions which would not have occurred after penicillin in any form.

The Michigan Department of Health immediately made arrangements to issue benzathine penicillin G for prophylactic treatment of any case reported to it as rheumatic fever, and the Crippled Children Commission offered funds from a trust to pay medical fees for its administration to children who had ever had a court order under either the Crippled or Afflicted Children's Acts. The program provides for ideal patient-physician relationship in that it is expected that most of the injections will be given in the physician's office,

(Continued on Page 450)

Editorial

OUR OBLIGATIONS TO THE CANCER PATIENT

This, the April issue of The Journal, is again designated as the "Cancer Number." This is done in co-ordination with the nationwide campaign of the American Cancer Society. The American Cancer Society, with the volunteers of the American Field Army, has become a potent factor in the lives of a large segment of our population. Through their publicity and educational programs, cancer has become a household word. It is now a favorite topic for luncheon meetings, for the cocktail hour, and also absorbs the energy of many women as their project for the year. Such activities produce different and sometimes strong reactions in the people so exposed. These people are our patients; therefore, these reactions are of importance to us who take care of these patients.

It is not the purpose of this editorial to impress the reader with the importance of the work of the Cancer Society, nor to increase your contribution to the Society, much as this may be needed. Rather, we would like to call your attention to certain obligations that the medical profession has towards those patients influenced by the publicity and educational programs of the American Cancer Society.

The main objective of cancer education has been early diagnosis with the implication that cure depends on this. That this implication is not always justified is not a sufficient reason for us as doctors to sabotage this point of education. Cancer detection or an examination for cancer only has not been accepted by many physicians, or, when forced on doctors by publicity, has often been done with little enthusiasm. The medical rebuttal, which is somewhat justified, has been that a good physical examination should detect cancer, diabetes, heart disease, muscular dystrophy, and any other nationally advertised disease. That this is true no one will deny, but herein lies one of our obligations to the people affected by cancer publicity. Has a good history been taken, and has a good physical examination been done? Does the patient leave the office satisfied? Unfortunately, too often the answer is "no."

One of the most embarrassing parts of speaking to lay groups on cancer is the question period afterward. Repeatedly, the statement is made, "But my doctor didn't even have me take off my shirt when he did my physical examination; why was that?" Or the complaint is that no rectal or vaginal examination was done during the "complete physical examination." Actually, no graduate of a medical school needs now to be told how to take a history or do a thorough physical examination; but we evidently need to be repeatedly reminded to do it. This is one of our obligations to the public that this editorial would emphasize.

The fear of cancer has been used in cancer publicity as a means of getting the patient to the doctor. Such emphasis has been placed on this that many doctors feel that the fear of cancer is a more serious disease than cancer itself. Certainly, it is far more prevalent. It is doubtful whether the present cancer publicity could be changed on a national level to eliminate fear, and it is debatable whether that would be to the best interest of the patient. Be that as it may, we as doctors have inherited the disease "fear of cancer" to treat. This is another of our obligations to the public affected by cancer publicity that this editorial would emphasize—the treatment of fear of cancer. We are all too familiar with the female patient almost hysterical with fear of cancer who comes in to have her breasts examined as the result of Cancer Society publicity. Probably her breasts need no treatment, but she certainly does. In addition to the "good physical examination," a few minutes taken to explain the hormonal influence on the physiology of the breasts will be much better treatment than sedation. Also, we all know the patient, male or female, whose ordinary apprehension is usually easily controlled, in whom psychoneurosis has suddenly become a debilitating illness due to a recent exposure to cancer publicity. These patient are an exasperating challenge to the best doctor, as they just might have cancer! For these patients, the addition of complete gastrointestinal x-ray examination, a sigmoidoscopic examination, and appropriate laboratory studies, when properly explained, may be sufficient treatment to return the patient

Medicine's Stake in Traffic Safety

In May, 1955, Michigan State Police statisticians predicted 2,000 traffic deaths during that year. When the official count was totalled at the end of 1955, there had been 2,001 highway deaths in Michigan. The statisticians estimated there would be 60,000 personal injuries in auto accidents; the 1955 records showed 60,465. The predicted 1955 accident rate was 193,000; the actual figure showed 193,927.

The experts have been more wary about their predictions for 1956. They are not so sure of what the toll will be this year, and that is an encouraging note. It is a good thing because, for the first time in years, Michigan looks to a noticeable decrease in deaths and injuries on her highways during 1956.

The reason is that the Legislature, with the strongest kind of support from the Governor and from the citizens of Michigan—including the Michigan State Medical Society and many other organized groups, have determined to do something about the problems of highway safety. The new speed limits, the additional state policemen to enforce them, the new state subsidy for driver training in our schools. and the other measures now in force, give Michigan a fine start in establishing a truly effective traffic safety program.

This program is in its infancy, and there is still much to be done. Many features of the program—particularly those dealing with the medical and psychological aspects of highway accidents—are within the rightful interest of the medical profession. and the citizens of Michigan will look to MSMS more and more for leadership in those areas.

Among other things. MSMS had been outspokenly in favor of a statewide driver training program well in advance of the Legislature's action in establishing the state subsidy, because statistically it was almost certain that traffic deaths could be cut by at least 10 per cent within ten years by this method alone.

The MSMS Committee on Study of Prevention of Highway Accidents is spearheading the traffic safety activities of the medical profession in Michigan and we all can be proud of the work done by this group to date.

In highway safety, as in so many other fields. there is a great potential for success when organizations, private citizens, and government work together toward the solution of evident problems. The medical profession of Michigan has one of its finest opportunities for public service by providing the guidance and leadership in the state's traffic safety program in those areas where Medicine has a direct responsibility. The individual doctor of medicine can and should do his important part of the overall job.

W. D. Jones.

President, Michigan State Medical Society

President's



Message

to a useful life. If so, such a work-up is worth the additional cost, even if not covered by our insurance plans. Our obligation to treat the fear of cancer is a very real one, both to the patient who does not have cancer and to the patient who has cancer. For the patient with cancer, we must see that adequate treatment, but not over-treatment, is used for the cancer. For the fear, a frank discussion, a realistic prognosis tempered with optimism, and the assurance to the patient that he will have continued care, make up a treatment program as important as the surgery or x-ray therapy used.

To recapitulate, we as doctors must realize that the publicity and educational programs of the American Cancer Society have had a profound influence on many of our patients. Through the fear of cancer, many patients now come to the doctor. We have the obligation to give these patients what they seek—a thorough physical examination —and when indicated, a "work-up" as we were taught to do in medical school. This is the best treatment for the fear of cancer when none can be found. When cancer is found, we have the obligation to see that the best treatment is made available for the cancer, and that, for the fear, a program of explanation and assurance of continued care is followed.

E. T. Thieme

NEEDED NATIONAL LEGISLATION

Favorable news letters have come from Washington mentioning that the Jenkins-Keogh Bill, authorizing self-employed professional men to make tax-free endowment building deductions would likely pass during this session. Lately, however, no word has come, and we are fearful the effort may be relaxing and we may again be left waiting.

Our members will remember that this bill places self-employed professional men on a slightly more favorable basis as compared to leaders in industry. Employers of executive and administrative personnel for many years have been allowed to set aside as "expense before taxes," sums of money to establish endowments for their executives—and these items are not all small. Recently, a well-known chairman of the board of a large industry announced his retirement, on a "salary" of $75,000 a year. He will pay taxes as he receives his allotments, but his company, in establishing the sponsoring fund, has been tax free.

We have suggested for more than ten years that medical men, attorneys, dentists, self-employed professional men, be granted a similar benefit—nothing exceptional or unusual—but a small degree of equality with our friends in the business world. At first, we suggest that the government establish a new endowment bond, similar to the tax-anticipation bond of the later war years. One eligible could invest up to 15 or 20 per cent of income each year; the interest was suggested to be small until the conversion into endowment.

The advantages would be a new outlet for Government bonds, and the Government would have the use of all the invested money. A bond sales program now in evidence might be eased. The investor would be placed on a plane somewhat more equal to his contemporaries.

Jenkins-Keogh introduced a bill accomplishing a somewhat similar purpose, for which we would settle, but we fear more letters are needed by our Congressmen in Washington. We hope no feet are dragging.

MEDICAL SOCIETY DUES

According to our By-Laws, the annual dues for the medical society are payable the first of the year, and after April 1, the member is automatically suspended. We all know the rule, yet too many neglect sending that check to the county secretary. The reason for the rule? There are several: (1) quite a number of years ago representatives of the U. S. Post Office Department came to the office of the editor at that time, stating that where membership in an organization gives the membership subscription to a periodical, the Post Office had ruled that those dues must be paid before April 1, or The Journal could not be mailed.

It had been customary under the old form of the Society to pay dues at the annual meeting, which came in September. One County Medical Society, however, had always paid in December and refused to change its rule. The Post Office required all Journals going to members of that society be held in the editorial office until the dues were paid.

Conforming to the adopted rule is so easy, and avoids much extra work. This notice is given to

all members because of a new ruling. The Roster number is now to be known as the Directory, and on account of the vast volume of work in preparing it, and the month earlier publication date, membership books are to be closed as of April 1, 1956. This notice is late and some leeway will probably be necessary, but county society officers are urged to send in all collections immediately.

We have said nothing about the amount of dues, but we have heard doctors complain about them many times. In the matter of dues, the medical profession should be thankful we are not a union. We are sure that all of our members know that county, state and AMA dues are paid to the county secretary. A discount of 1 per cent of the dues has been granted to the county secretary for the trouble of collecting. To relieve more clerical trouble, the auditors have stated that if this percentage is not retained by the county secretary when mailing his checks, it will not be returned. This action was approved by the Michigan State Medical Society Council.

NEW MEDICAL SCHOOLS FOR MICHIGAN

At the Panel of Deans held during the annual session of the Michigan State Medical Society in Grand Rapids, September 26, 1955, Dean A. C. Furstenberg of the University of Michigan School of Medicine stated that the State of Michigan would need another medical school to meet the educational requirements, and by 1975 might need a fourth. THE JOURNAL commented editorially in November, 1955 (page 1346) mentioning that for the last ten years ending in 1954 we had imported annually an average of 266 doctors of medicine—more than our own schools are producing. The University of Michigan is at its economic limit of approximately 200 graduates in a year. Wayne University College of Medicine is increasing in another three years to give us 75 graduates. Wayne could be enlarged much more readily to produce another fifty or even a hundred students than to attempt the enormous task of building a complete new school, and it could be done in several years' less time. After pointing out our insufficient effort THE JOURNAL said, "Wake up, Michigan."

Evidently, Michigan has responded. In the March number, we reported in the Medical News column the effort from Grand Rapids which asks the Board of Regents of the University of Michigan to establish a school of medicine in Grand Rapids, pointing out educational facilities, undergraduate opportunities and various cultural advantages. The Regents, at their meeting February 10, authorized the President to visit Grand Rapids and study the problem.

It has been rumored that private interests are ready to advance large sums to establish a medical school in Flint in conjunction with the branch of the University now operating in Flint. The Editor has heard several times that donations are being considered to establish a medical department of the University of Detroit, the Jesuit school, as a logical and appropriate site for the third medical school in Michigan. The city of Detroit and its environs having over three million inhabitants makes Detroit especially eligible. Practically every other city of that size in the nation has from two to five medical schools.

Another applicant for consideration is the city of Lansing with two requests. On February 17, 1956, the Lansing city council adopted a resolution inviting the Board of Regents of the University of Michigan to consider Lansing as a site for a branch medical school, using the present property of the Boys' Vocational School. At about the same time, the Lansing School Board voted to petition the State Legislature to take action to obtain a branch medical school. On February 18, 1956, the State Board of Agriculture, after a meeting with six Lansing physicians, went on record as favoring the establishment of a medical school as part of the Michigan State University. President Hannah of Michigan State University points out the cost of organizing a new medical school: $20,000,000 at the University of Washington, and $16,000,000 at the University of Florida.

On Sunday, February 26, the *Kalamazoo Gazette* published several columns outlining the advantages of Kalamazoo as a site for a medical school. Kalamazoo already has two state hospitals and a potential Western Michigan University (Western Michigan College) and two other colleges in addition to two large hospitals. The city and state both own available land which could be used.

Now there are six projects to establish a second medical school. We believe the Survey of Higher Education on a grand scale, as suggested through the anticipated generosity of the Kellogg Foundation, should not be further delayed. The

Ruthven report evidently did not go far enough. It would be unfortunate for six projects to work from such different directions when controlled guidance is so evidently needed.

An authoritative overall surveying committee is needed to canvass these and possibly other projects for a third medical school. Sage and just recommendations may avoid mistakes and lessen headaches.

BLUE CROSS PROBLEM

At this writing (February 27, 1956), the State is in a turmoil about the Blue Cross rate increases. The newspapers and radio are quoting and misquoting persons who might know some answers. Union leaders started the controversy by demanding an investigation at the time the rate increases were granted. The statement was made that Michigan Hospital Service had done nothing to hold down hospital expenses. Doctors were freely charged with being blameworthy because of over-utilization in several areas: (1) too many days in the hospital, (2) unnecessary or non-insured hospitalization, (3) too many and too expensive service such as unnecessary laboratory tests, or medication or treatments continued beyond need. Notwithstanding any faulty utilization in any form, one item stands out. Hospital per diem costs have gone up. Industry has met increased production costs by many means, and hospitals have attempted to do so.

One item, cost of labor, is ignored, yet more than 85 per cent of the increase in operating costs over the last five years has been salaries and wages. Hospitals are desperately competing for help. They do not and cannot equal wages paid to comparable people in industry. A further reason for increased costs is the much more frequent hospitalization habit of our people. The voluntary hospital and medical plans were established definitely to guarantee to the low income person proper hospital and medical care when catastrophic illness should strike. Hospitalized care at that time was a catastrophe for 85 per cent of our people. Bed and board and hall nursing only were promised and surgery in the hospital. The public, our subscribers, labor and others have constantly demanded more complete services which have necessarily raised costs. Patrons of hospital services must accept the inevitable. Wages and salaries have advanced much more than hospital expenses. The same holds true for automobiles and most of the things we buy.

There has been much criticism of a profound socio-economic advancement which grew out of a prolonged period of distress. The medical profession is getting more than its share of black eyes. We believe, however, that every doctor of medicine should be scrupulously co-operative in giving our patients the best and necessary care, but avoiding any unnecessary expense.

Blue Cross is the target from every side, but some of the shots are going in our direction (Blue Shield). Great public service is being hampered. Let us be blameless as individuals.

FOR GENERAL BASIC INFORMATION

Most of our doctors know the difference between Blue Cross and Blue Shield; others, our critics and our defenders, may be in the dark.

There are two separate and distinct corporations with two sets of Boards of Directors or Trustees, and organized under two different enabling acts. Blue Cross (Michigan Hospital Service) deals only with in-hospital care. It was established by the Michigan Hospital Association in co-operation with the Michigan State Medical Society. The Board of Trustees has twenty-one representing hospitals, fourteen representing the public, and six representing the Michigan State Medical Society.

Blue Shield (Michigan Medical Service) was established and sponsored by the Michigan State Medical Society. It covers medical and surgical services, and pays directly to the doctor for services to subscribers. Its Board of Directors has twenty-two medical doctors, six representatives of the public, and six representatives of the hospitals.

NEW TUBERCULIN TESTING MATERIAL

(Continued from Page 438)

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2. Palmer, C. E.; Nash, F. A., and Nyboe, J.: Tuberculin-sensitivity in the London area. Lancet, 2:1274, 1954.

Three-day Seminar Inspires County Societies' Leaders

The 1956 MSMS Annual County Secretaries-Public Relations Seminar in Detroit January 27-28-29, the most ambitious program of this type ever planned, was carried out with flawless precision. Experimentally, the 1956 meeting was expanded into a full-scale seminar extending over a three-day period; so successful were the results that the 1956 participants voted overwhelmingly to continue the three-dav format next year.

Several varied techniques were used to present information designed to give county medical societies a boost in planning activities and operating their programs for the coming year. Beyond this change of pace in subject presentation, participants had full opportunity to absorb and digest the quantities of information and inspiration presented.

The guest speakers who conducted the discussions during the three-day seminar, including several from outside Michigan, represented an unusual array of talent.

Featured in the three days of lecture and discussion were the problems which the medical profession faces in the future, the important function of the county society in medical organization, the services available from MSMS to county societies, and the public relations activities most important currently to county societies and the medical profession.

The opening session was a panel discussion by four men outstanding in their respective fields. The second session was in the form of an actual classroom situation, including a written examination!

Perhaps the most unusual session was the "Experts at Bay" program on Saturday afternoon. This session provided face-to-face conferences with "experts" in fifteen different fields vital to medical societies and doctors of medicine. Questions asked of these "experts" were recorded, then screened and evaluated by the experts who chose the ten most challenging inquiries asked by the participants.

Prizes for asking the ten most challenging questions were presented at the final session to: M. W. Buckborough, M.D., South Haven; W. G. Gamble, M.D., Bay City; Miss Else Kolhede, Detroit; B. C. Payne, M.D., Ann Arbor; R. W. Teed, M.D., Ann Arbor; A. K. Cameron, M.D., Saginaw; W. S. Jones, M.D., Menominee; J. B. Rowe, M.D., Flint; Sydney Scher, M.D., Mt. Clemens; and C. N. Hoyt, M.D., Port Huron.

L. A. Drolett Honored

Another high point of the program was the presentation of a scroll to L. A. Drolett, M.D., of Lansing, honoring him for his 10 years as Chairman of the MSMS Legislative Committee. The award was in the form of a framed copy of the resolution adopted by the 1955 MSMS House of Delegates.

A great many registrants at the seminar expressed regret that every county medical society in Michigan was not represented.

In a letter to the MSMS Executive Office following the seminar, an officer from one smaller society called the seminar "one of the best and smoothest conferences of its kind on record." He continued:

"It makes one proud to belong to the MSMS when he can see examples of such proficiency," he went on. "Less proud am I of those who did not attend and I sincerely trust that next year we can have a representative from every county. Somehow we must let the non-attenders realize what they are missing and the obligation each county society has to attend."

The Secretary of a larger society wrote:

"The Seminar was well planned, effectively organized, and conducted with great ability—a splendid example of teamwork. I got considerable out of it and so did the President-Elect and Public Relations Chairman of our County Society. Already they are planning an orientation of all new and some old members."

From the Executive Secretary of one of the largest county societies:

"I found the entire program from beginning to end interesting and stimulating. I would be unable to suggest a single change. I particularly enjoyed the 'Experts at Bay' for it gave me an opportunity to confer with the 'experts' on matters pertinent to my county."

A representative of the Michigan State Medical Assistants Society stated:

"It was a most interesting and helpful program and should aid us in setting up our program in the future."

A County Society officer from the Upper Peninsula wrote to the Secretary of MSMS:

"This was the first time I have been able to attend this meeting. I would like you to know how much I enjoyed it. . . . Your subjects and speakers were excellent. The precision with which the entire program was carried out was almost unbelievable. I think you and everyone else connected with it deserve congratulations from all who attended. . . . I certainly plan to attend next year."

Two New Informational Handbooks

Of exceptional interest was the introduction of two MSMS handbooks at the seminar. One entitled "So You've Been Elected," is aimed at county society officers and is a guide for stimulating interest in society activities, smoothing out the administration of component societies, and meshing in with the programs of MSMS. The second handbook, entitled "Progress: Because Doctors Work Together," is packed with information for every member of MSMS and after its initial distribution to all members will be used as an indoctrination medium for all new members as they join MSMS.

Those who took an active part as lecturers, discussion leaders, counsellors, and session chairmen were:

Howard G. Benjamin, M.D., Grand Rapids, Chairman of County Secretaries; C. Allen Payne, M.D., Grand Rapids, Chairman, MSMS Public Relations Committee; Wm. S. Jones, M.D., Menominee, MSMS President; Louis H. Charbonneau, Detroit, Commissioner, State Bar of Michigan; Robert L. Novy, M.D., Detroit, Past President, Michigan Medical Service; Lester D. Bibler, M.D., Indianapolis, AMA Delegate from General Practice Section; Congressman August E. Johansen, Battle Creek; R. G. Van Buskirk, Chicago, Executive Secretary, AMA Committee on Legislation; Ernest B. Howard, M.D., Assistant Secretary, AMA; J. Joseph Herbert, Manistique, MSMS Legal Counsel; Hugh W. Brenneman, Lansing, MSMS Public Relations Counsel; Jackson E. Livesay, M.D., Flint, Speaker of MSMS House of Delegates; C. D. Selby, M.D., Port Huron; L. Fernald Foster, M.D., Bay City, MSMS Secretary; Wm. J. Burns, Lansing, MSMS Executive Director; D. Bruce Wiley, M.D., Utica, Chairman of The Council, MSMS; Jay C. Ketchum, M.D., Detroit, Executive Vice President, Michigan Medical Service; Arch Walls, M.D., Detroit, MSMS President-Elect; Julian P. Price, M.D., Florence, South Carolina, Trustee, American Medical Association.

Participants in the "Experts at Bay" session, under the chairmanship of W. B. Harm, M.D., Detroit, Vice Chairman of The Council, MSMS, were:

William Bromme, M.D., Detroit; Wilfrid Haughey, M.D., Battle Creek; Harry F. Becker, M.D., Detroit; Jay C. Ketchum, Detroit; Thomas C. Paton, Detroit; Dr. Foster; Robert A. Enlow, Chicago; Carl G. King, Saginaw; Lawrence A. Drolett, M.D., Lansing; Dr. Livesay; Dr. Payne; Mr. Herbert; Horace W. Porter, M.D., Jackson; Brooker L. Masters, M.D., Fremont; E. H. Wiard, Lansing; E. C. Swanson, M.D., Vassar; Donald A. Kerr, D.D.S., Ann Arbor; Dr. Walls; Allison E. Skaggs, Battle Creek; Frank J. Busch, M.D., Saginaw; Dr. Howard, and Dr. Novy.

Those who registered for the 1956 County Secretaries-PR Seminar included:

County Secretaries.—J. E. Mahan, M.D., Allegan (Allegan); Harold Kessler, M.D., Alpena (Alpena-Alcona-Presque Isle); E. L. Phelps, M.D., Hastings (Barry); L. Fernald Foster, M.D., Bay City (Bay-Arenac-Iosco); T. B. Mackie, M.D., Sault Ste. Marie (Chippewa-Mackinac); J. M. Cook, M.D., Charlotte (Eaton); J. B. Rowe, M.D., Flint (Genesee); Bernard Sweeney, M.D., Traverse City (Grand Traverse-Leelanau-Benzie); J. M. Wood, M.D., Mt. Pleasant (Gratiot-Isabella-Clare); C. F. Wible, M.D., Sebewaing (Huron); J. A. Van Loo, M.D., Belding (Ionia-Montcalm); H. W. Porter, M.D., Jackson (Jackson); E. O. Pearson, M.D., Kalamazoo (Kalamazoo); H. G. Benjamin, M.D., Grand Rapids (Kent); J. R. Doty, M.D., Lapeer (Lapeer); C. L. Cook, M. D., Tecumseh (Lenawee); R. M. Duffy, M.D., Pinckney (Livingston); J. R. Acocks, M.D., Marquette (Marquette-Alger); J. A. White, M.D., Big Rapids (Mecosta-Osceola-Lake); L. G. Glickman, M.D., Menominee (Menominee); H. C. Tellman, M.D., Muskegon (Muskegon); J. P. Klein, M.D., Fremont (Newaygo); E. F. Crippen, M.D., Mancelona (Northern Michigan); G. N. Petroff, M.D., Pontiac (Oakland); C. D. Selby, M.D., Port Huron (St. Clair); H. C. Johnson, M.D., Paw Paw (Van Buren—Proxy for Secretary D. K. Morgan, M.D.); B. C. Payne, M.D., Ann Arbor (Washtenaw); M. R. Weed, M.D., Detroit (Wayne); and W. W. Moon, M.D., Cadillac (Wexford-Missaukee).

County Presidents.—R. E. Reagan, M.D., Benton Harbor (Berrien); W. E. Nettleman, M.D., Coldwater (Branch); T. J. Trapasso, M.D., Sault Ste. Marie (Chippewa-Mackinac); L. O. Shantz, M.D., Flint (Genesee); B. J. Graham, M.D., Alma (Gratiot-Isabella-Clare); J. M. Wellman, M.D., Lansing (Ingham); G. W. House, M.D., Greenville (Ionia-Montcalm); Don Marshall, M.D., Kalamazoo (Kalamazoo); H. R. C. Eddy, M.D., Adrian (Lenawee); Sydney Scher, M.D., Mt. Clemens (Macomb); H. J. Kerr, M.D., Muskegon (Muskegon); A. K. Cameron, M.D., Saginaw (Saginaw); and M. W. Buckborough, M.D., South Haven (Van Buren).

County Presidents-Elect.—Bert VanDerKolk, M.D., Allegan (Allegan); F. P. Husted, M.D., Bay City (Bay-Arenac-Iosco); O. J. Preston, M.D., Flint (Genesee); John E. McEnroe, M.D., Ironwood (Gogebic); L. F. Thalner, M.D., Jackson (Jackson); D. B. Hagerman, M.D., Grand Rapids (Kent); J. E. Manning, M.D., Saginaw (Saginaw); C. N. Hoyt, M.D., Port Huron, (St. Clair); and L. R. Leader, M.D., Detroit (Wayne).

County Bulletin Editors.—P. K. Stevens, M.D., Flint (Genesee).

County Society Public Relations Chairmen.—J. W. Bunting, M.D., Alpena (Alpena-Alcona-Presque Isle); D. J. Pearson, M.D., Battle Creek (Calhoun); G. E. Anthony, M.D., Flint (Genesee); Robert O. Smith, M.D., Ionia (Ionia-Montcalm); C. Glen Callander, M.D., Kalamazoo (Kalamazoo); F. S. Gillett, M.D., Grand Rapids (Kent); C. A. Benz, M.D., Adrian (Lenawee); D. L. Rousseau, M.D., Mt. Clemens (Macomb); F. J. Busch, M.D., Saginaw (Saginaw); W. D. Cleland, Jr., M.D., Port Huron (St. Clair); J. M. Jacobowitz, M.D., Three Rivers (St. Joseph); F. J. Loomis, M.D., Paw Paw (Van Buren); and Dean W. Seger, M.D., Lake City (Wexford-Missaukee).

MSMS Council.—R. H. Baker, M.D., Pontiac; J. E. Livesay, M.D., Flint; K. H. Johnson, M.D., Lansing; W. S. Jones, M.D., Menominee; Arch Walls, M.D., Detroit; A. E. Schiller, M.D., Detroit; G. W. Slagle, M.D., Battle Creek; Ralph W. Shook, M.D., Kalamazoo; G. B. Saltonstall, M.D., Charlevoix; B. T. Montgomery, M.D., Sault Ste. Marie; T. P. Wickliffe, M.D., Calumet; D. Bruce Wiley, M.D., Utica; G. Thomas McKean, M.D., Detroit; W. B. Harm, M.D., Detroit; William Bromme, M.D., Detroit and Wilfrid Haughey, M.D., Battle Creek.

Executive Secretaries of County Medical Societies.—Mrs. Sara Warren, Flint; R. O. Kinsman, Grand Rapids; James Devereaux, Pontiac; Carl G. King, Saginaw; Else Kolhede, Detroit.

Woman's Auxiliary Representatives.—Mrs. A. C. Stander, Saginaw; Mrs. C. Allen Payne, Grand Rapids; Mrs. Robert Reagan, Benton Harbor; Mrs. Delbert MacGregor, Flint.

Michigan State Medical Assistants Society Representatives.—Miss Hallie Cummins, Caro; Miss Marie A. Erickson, Saginaw; Miss Doris E. Jarrad, Lansing; Miss Lorine Nuechterlein, Saginaw; Mrs. Elizabeth E. Peck, Detroit; Miss Marlouise Redman, Detroit.



A panel on "The Four Basic Threats to Health Welfare" opened the 1956 County Secretaries-PR Seminar. Participants *(left to right)* were: R. L. Novy, M.D., Detroit, "Medical Practice by Business"; L. H. Charbonneau, Detroit, State Bar Commissioner, "Corporate Practice of Medicine"; MSMS President W. S. Jones, M.D., Menominee, moderator; L. D. Bibler, M.D., Indianapolis, Ind., Delegate to GP Section of AMA, "Encroachment of Ancillary Groups," and Congressman A. E. Johansen, Battle Creek, "Broader Socialization Schemes."



C. D. Selby, M.D., of Port Huron *(right)* was elected Chairman of the County Secretaries group at the closing session. The 1955 Chairman, Howard G. Benjamin, M.D., of Grand Rapids, cheerfully turned over the records and plans for next year.



L. A. Drolett, M.D., of Lansing, now serving his 11th year as MSMS Legislative Committee Chairman, was honored at the Saturday luncheon. Dr. Drolett *(left)* received a framed copy of an honorary resolution adopted by the 1955 House of Delegates from the hands of J. E. Livesay, M.D., Flint, Speaker of the MSMS House of Delegates.



"Experts at Bay" was the most unusual session presented at the seminar. Under the chairmanship of W. B. Harm, M.D., Detroit, Vice-Chairman of The Council, seminar participants had an opportunity for private conferences in fifteen different areas important to medical organization and medical practice. Twenty "experts" consulted with visitors at conference tables arranged for this purpose. Dr. Harm *(standing second from right)* is chatting with W. S. Jones, M.D., MSMS President, concerning selection of the ten most challenging questions asked at this session.

MSMS Public Relations Committee.—C. Allen Payne, M.D., Grand Rapids; R. W. Teed. M.D., Ann Arbor; M. W. Buckborough, M.D., South Haven; E. H. Fenton, M.D., Detroit; W. G. Gamble, Jr., M.D., Bay City; L. E. Grate, M.D., Charlevoix; A. B. Gwinn, M.D., Hastings; R. C. Kingswood, M.D., Detroit; E. C. Long, M.D., Detroit; G. E. Millard, M.D., Detroit; E. S. Oldham, M.D., Breckenridge; W. Z. Rundles, M.D., Flint; E. L. Spoehr, M.D., Ferndale; C. K. Stroup, M.D., Flint; Wayne L. Whitaker, Ph.D., Ann Arbor; and V. M. Zerbi, M.D., Ypsilanti.

Guests.—Mrs. J. R. Acocks, Marquette; Henry Alexander, Detroit; Mrs. G. E. Anthony, Flint; Harry F. Becker, M.D., Battle Creek; Lester D. Bibler, M.D., Indianapolis, Ind.; Mrs. Shirley Block, Lansing; Rudolph Bolich, Detroit; W. W. Boyles, Detroit; Russell J. Burns, Detroit; L. H. Charbonneau, LL.B., Detroit: Verne Collett, Detroit; Mrs. Harold Cornelius, Grand Rapids; Mrs. James Devereaux, Pontiac; L. A. Drolett, M.D., Lansing; Robert A. Enlow, Chicago; R. F. Fenton, M.D., Detroit; L. Gordon Goodrich, Detroit; J. Joseph Herbert, J.D., Manistique; E. B. Howard, M.D., Chicago; Hon. A. E. Johansen, Battle Creek; Mrs. Harold Johnson, Paw Paw; Donald A. Kerr, D.D.S., Ann Arbor; J. C. Ketchum, Detroit; Peter E. Klein, Detroit; John Lindsey, Detroit; Mrs. F. J. Loomis, Paw Paw; B. L. Masters, M.D., Fremont; Robert Morse, Detroit; R. L. Novy, M.D., Detroit; Harry Parke, Detroit; Thomas C. Paton, Detroit; Anton Patti, Detroit; Julian P. Price, M.D., Florence, S. C.; F. P. Rhoades, M.D., Detroit; Charles Rickett, Detroit; Miss Helen Schick, Detroit; Mrs. L. O. Shantz, Flint; Allison E. Skaggs, Battle Creek; Mrs. A. E. Skaggs, Battle Creek; H. Leon Snow, Lansing; E. C. Swanson, M.D., Vassar; Melvin Temmer, Detroit; Miss Kay Topp, Detroit; R. G. Van Buskirk, LL.B., Chicago; Miss Betty Vandenbossche, Kalamazoo; John E. Verbiest, Detroit.

RECORD OF ATTENDANCE AT MSMS COUNTY SECRETARIES-PUBLIC RELATIONS SEMINAR

January 27-28-29, 1956

County or District Medical Society	*Pres.*	*Pres.-Elect.*	*Secy.*	*P.R. Chairman*	*Editor*	*MSMS Councilor*	*MSMS P.R. Committee*	*Exec. Secy.*
Allegan	O	X	X	O	N	X	N	N
Alpena-Alcona-Presque Isle	O	O	X	X	N	O	XO	N
Barry	O	O	X	X	N	O	X	N
Bay-Arenac-Iosco	O	X	X	O	O	O	XX	N
Berrien	X	O	O	O	O	X	O	N
Branch	X	O	O	N	N	X	O	N
Calhoun	O	O	O	X	O	X	O	N
Cass	O	O	O	N	N	X	N	N
Chippewa-Mackinac	X	O	X	O	N	X	XX	N
Clinton	O	O	O	O	N	O	N	N
Delta-Schoolcraft	O	O	O	O	N	X	N	N
Dickinson-Iron	O	O	O	N	N	X	N	N
Eaton	O	O	X	N	N	O	N	N
Genesee	X	X	X	X	X	O	OOXX	X
Gogebic	O	X	O	O	N	X	N	N
Grand Traverse-Leelanau-Benzie	O	O	X	O	N	X	O	N
Gratiot-Isabella-Clare	X	O	X	X	N	O	X	N
Hillsdale	O	O	O	O	N	O	N	N
Houghton-Baraga-Keweenaw	O	X	O	X	O	X	X	N
Huron	O	O	X	O	N	O	O	N
Ingham	X	O	O	O	O	O	OOO	N
Ionia-Montcalm	X	O	X	X	N	O	N	N
Jackson	O	X	X	O	N	O	N	N
Kalamazoo	X	O	X	X	O	X	O	N
Kent	O	X	X	X	O	O	XXOO	X
Lapeer	O	O	X	O	N	O	N	N
Lenawee	X	O	X	X	N	O	N	N
Livingston	O	O	X	N	N	O	N	N
Luce	O	O	O	N	N	X	N	N
Macomb	X	O	O	X	N	X	X	N
Manistee	O	O	O	O	N	X	N	N
Marquette-Alger	O	O	X	O	N	X	N	N
Mason	O	O	O	N	N	O	O	N
Mecosta-Osceola-Lake	O	O	X	X	N	O	N	N
Menominee	O	O	X	X	N	X	N	N
Midland	O	O	O	O	N	O	N	N
Monroe	O	O	O	O	N	O	O	N
Muskegon	X	O	X	O	O	O	OO	O
Newaygo	O	O	X	O	N	O	N	N
North Central	O	O	O	N	N	O	O	N
Northern Michigan	O	O	X	X	N	X	X	N
Oakland	O	O	X	X	O	X	OXX	X
Oceana	O	O	O	O	N	O	N	N
Ontonagon	O	O	O	N	N	X	O	N
Ottawa	O	O	O	O	O	O	N	N
Saginaw	X	X	O	X	O	O	N	X
St. Clair	O	X	X	X	N	O	OO	N
St. Joseph	O	X	O	X	N	X	X	N
Sanilac	O	O	O	O	N	O	N	N
Shiawassee	O	O	O	O	N	O	O	N
Tuscola	O	O	O	N	N	O	N	N
Van Buren	O	O	X	X	N	X	X	N
Washtenaw	O	O	X	O	X	O	OXX	O
Wayne	O	X	X	O	O	XXXX	XXXXXX OOOOO	X
Wexford-Missaukee	O	O	X	X	N	X	N	N

X = present; O = not present; N = no such officer

Others present at the seminar were:

Woman's Auxiliary representatives—four; Michigan State Medical Assistants Society representatives—six; Michigan Medical Service representatives—fourteen; Michigan Hospital Service representatives—four; Seminar speakers—thirteen; Guests—fourteen.

Mrs. Delbert N. MacGregor

President, MSMS Woman's Auxiliary, 1955-1956

For one who knows Rita MacGregor well, it would be impossible to give an impersonal recital of her many academic and educational achievements, no matter how hard the writer tried, and it is from very personal knowledge and association with Mrs. MacGregor that the author knows and admires her most.

Rita MacGregor is an amazing individual with great and many abilities, yet ability does not adequately describe the drive, force, the determination she brings to whatever task is at hand. Chat with her and one is often surprised and intrigued with the ramifications of her animated conversation, which results from her intense interest in the "so many things that make this world go round."



Thus, perhaps it is not surprising to learn that she loves music, both classical and popular, plays the piano well, and loves to dance. Such a statement, however, is a very superficial appraisal of Rita MacGregor's liking for music, for her interest in and knowledge of music is deep, extending from her childhood. She was brought up in a home stacked with complete record albums of the classics, the great singers such as Caruso, and the operas that were the favorites of her parents and a music-loving uncle. This talent was stimulated by weekly attendance at the Chicago Civic Opera with her family for many years. Going to the opera is, of course, a gala affair for many; but for young Rita MacGregor it was a seat in the second balcony with the "shoemakers" and other common people who just loved good music.

The eldest of four children, Mrs. MacGregor was born Rita Mary Biondi in Chicago. As the eldest, incidentally, it became her responsibility later, as a faculty member at Alma College, to assist in the education of a younger sister.

A review of Rita MacGregor's education is most illuminating, because it shows a consistent eagerness and alertness in so many phases of living, learning, and knowing. After completing her early education in Chicago, she entered the School of Liberal Arts at Northwestern University. Her decision had been to major in languages with the idea of becoming a translator in the Diplomatic Service. This required much advanced study, four years of both French and Latin, and considerable study in Spanish, German, and Italian. However, there also was a requirement in science necessary for graduation, and what with her heavy schedule in languages, none of the "easy" courses was available, and she had to settle upon zoology. Science became a burning interest, and she ended up with another major in her college credits.

One who helped greatly to intensify this interest was Dr. Arch E. Cole, at present Dean of Admissions at the University of Louisville Medical School. With her new-found enthusiasm for science, Rita MacGregor by her junior year was an assistant instructor in the zoology laboratory, and during the summer session she served as laboratory instructor in comparative anatomy and cat anatomy.

Competing on a national level, Rita MacGregor's scholarship record and examinations won her a Fellowship in zoology. By the time she had closed her college career, including advanced study, she not only had a Bachelor of Arts and a Master of Science in Physiology, but she was a

member of Phi Beta Kappa and the national scientific honor society, Sigma Xi, either one of which would have been a great distinction.

With all this, there had also been time for social activities as an active member of the national sorority, Alpha Omicron Pi.

In spite of a strong inclination to enter medical school, Mrs. MacGregor's decision was to teach first. She came to Michigan as a biology instructor at Alma College, and by the middle of her first year was handling both lecture and laboratory in such pre-medical subjects as comparative anatomy and embryology. In a year, she had become Assistant Dean of Women also.

It was three years before she began to think of wider horizons. With work well started toward a Ph.D. degree at the University of Michigan, she applied—and was awarded—a Fellowship at Duke University. By this time, however, Delbert MacGregor was definitely in her future and in 1932 she started her career as a doctor's wife.

This new career included working with Dr. MacGregor in his office in Flint, a phase which ended in 1942 with the birth of their daughter, Rita Mary. As a housewife and mother, Rita MacGregor soon was able to direct her "leisure" time into many channels, much to the benefit of Flint. A long list of activities in which she has taken part includes service as a Board member of the YWCA, President of the Senior Needlework Guild, Board member of the Flint Chapter of the American Association of University Women, and active participation in the Girl Scouts, PTA, Child Study Group, and other organizations. In the Woman's Auxiliary to the Genesee County Medical Society, she has served in many capacities including the Presidency in 1949. Under her leadership, the Genesee Auxiliary experienced a great growth and development. Prior to her current position as President of the MSMS Woman's Auxiliary, she filled the usual variety of lesser positions, and also served as Regional Chairman of Civil Defense for the National Auxiliary.

To add to the variety, at times Rita MacGregor teaches interior decorating in the adult education program of Flint's famous Mott Foundation.

Rita MacGregor is one with a talent for stimulating interest within a group, and incorporating everyone in the fold of united endeavor. She has the ability to organize with patient attention to every detail. When she addresses a group, it is with vigor and enthusiasm which stems from a sincere belief in what she is discussing. It is fascinating to watch a large audience "come to life" and listen with rapt attention when she presides over a meeting. The quickening of interest and the stirring of enthusiasm actually becomes visible.

Yet all of this efficiency and zest for doing things is carried on with a broad smile and a gay and infectious friendliness which is irresistible. Whenever anyone speaks of Rita MacGregor, it seems the comment always begins with the same words, "Oh, she is wonderful. . . ."

And she is!

Evelyn C. McLeod

RHEUMATIC FEVER PROPHYLAXIS

(Continued from Page 439)

and frequent contact with the patient will thus be maintained. As is the case in all care under the Crippled Children Program, the parent must indicate desire for the care.

Dr. Robert E. Fisher's interest in rheumatic fever began while he was in Bay City. A graduate of Washington University School of Medicine, he was trained in medicine at Henry Ford Hospital and moved to Bay City after his military service, where he was associated with the Jones Clinic until late 1955, at which time he opened his office in Battle Creek. He is a diplomate of the American Board of Internal Medicine and an associate of the American College of Physicians, is a member of the Rheumatic Fever Control Committee, Michigan State Medical Society, and is active in the Michigan Heart Association and the Michigan Multiple Sclerosis Society.

Jean Paul Worth

Newsman and Partner with M. D.'s in Medical Reporting

Jean Paul Worth, who received a Michigan State Medical Society award last year for doing excellent work in reporting and informing about health matters, is a man of many talents.

Author, lecturer, actor, artist, lumberman and woodsman, student, educator, he carried an ideal background into his newspaper work.



As an editor, he demands— and gets—detail, accuracy, and fairness, and the greatest of these is fairness—a fairness to his publisher, to his readers, and to his story. That's what brought him to the attention of medical men in his home town of Menominee.

Born on May 5, 1904, he graduated from Menominee High School in 1922. After a trick at lumbering and working in a shingle mill, he turned reporter on the *Menominee Herald-Leader* for a year before going to New York where he graduated from the American Academy of Dramatic Arts. He played bit parts on the legitimate stage with such actors as Pat O'Brien, Josephine Hutchinson, and Rita Romilly.

On a vacation in his home town, he suffered a skull fracture and facial paralysis in a motor accident and gave up the theater. He returned to the *Herald-Leader* as a reporter, then moved to the *Detroit Times* as a reporter and promotional employe. He returned to the *Herald-Leader* in 1931 as a reporter, then advanced to City Editor, Managing Editor and, in 1943, became Editor upon the death of Roger M. Andrews.

One of Worth's problems was reporting accidents and relative stories pertaining to medical men. A constant battle for detail, accuracy, and fairness, and a constant struggle with city, county and state officers, investigators, attorneys, and medical men brought him before the Menominee County Medical Society.

Worth outlined his problem to the physicians. They could do a greater service to their own patients as well as halt rumors and keep the public informed, and could, perhaps, even help prevent accidents by helping the press give more accurate coverage.

It boiled down to getting the facts straight in a way they could be understood by the average reader, and from the person best qualified—the attending physician.

The idea struck home. Many doctors told of experiences where patients had been reported with injuries that never existed—a bloody nose grew to a basal skull fracture by the time it hit print.

The Menominee County Medical Society did something about it. They joined with Worth in an effort for clarity and accuracy. A reporter now calls a doctor, tells the receptionist who is calling and about which patient. It takes the doctor but a minute to give a clear detailed report of injuries. The doctor has lost but a minute, and the story is straight.

An editor's crusade for accuracy helped medical

(Continued on Page 452)

Mr. Worth was presented with a special award at the MSMS 1955 Annual Session "for making a distinguished contribution to public understanding of Medicine and Health by the objective reporting and editorial interpretation of medical problems and progress." This is one in a series of sketches of persons honored by MSMS.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

DIPHTHERIA CASES INCREASE

As of March 1, thirty-five cases of diphtheria have been reported to the Michigan Department of Health. This compares with a total of fifty-nine cases for the entire year of 1955. So far, cases of diphtheria have turned up in St. Clair, Kalamazoo and St. Joseph Counties and in Detroit.

More trouble from diphtheria can be expected unless all children are immunized and given booster shots on schedule. In areas where diphtheria cases do develop, the department recommends Shick tests for teen-agers and adults and booster doses of toxoid if needed.

HOSPITAL LICENSING

The Michigan Department of Health has recently released a list of 237 Michigan hospitals that are now fully licensed to provide maternity care. This compares with only 143 hospitals on the fully approved list three years ago, and 185 two years ago.

Hospitals on the fully approved list have a total of 3,921 maternity beds available. Qualifications for a fully approved license for maternity care include ninety-three regulations which must be met in addition to forty-four provisions which must be included in plans for the immediate future.

CHRONIC DISEASE PROGRAM

The major chronic diseases considered in Michigan's public health programs and services are cardiovascular renal disease, tuberculosis, cancer, diabetes and syphilis. Heart disease and cancer together accounted for 54.4 per cent of the deaths in Michigan in 1954.

The Michigan Department of Health and the forty-three local health departments are currently carrying out activities based on a seven point chronic disease program. These activities fit into the following pattern:

1. *Casefinding.*—Chest x-ray and other screening activity; promotion of cervical carcinoma screening; clinic services in TB and VD; promotion of broader pre-employment examinations; promotion of cancer detection clinics and of expanded laboratory services.
2. *Care and Treatment.*—Referral for care; public health home nursing services.
3. *Follow-up.*—Follow-up of suspect cases discovered in screening projects; assist in maintaining medical supervision of all diagnosed cases.
4. *Research.*—Demonstration or pilot projects (casefinding); statistical studies of mortality and morbidity.
5. *Education and Training.*—Institutes and conferences for state and local health department personnel; externships.
6. *Records and Records Management.*—Expansion of the state tuberculosis central register to include cancer.
7. *Ancillary Services.*—Assisting in community organizations for casefinding; medical-social service, both consultation and direct service.

LETTERS TO EXPECTANT MOTHERS

The department has recently revised its series of letters on pre-natal care which are available to any expectant mother on request from her physician. The letters, eight in all, are sent out once each month and suggest answers to questions often asked by expectant mothers. They include such things as a discussion of the importance of a thorough physical examination by the doctor early in pregnancy, suggestions on nutrition, hints on proper wearing apparel and assembly of a layette, signs of labor, advantages of nursing the baby, and care of the mother and child after leaving the hospital. In addition to the eight letters addressed to the expectant mother there is an initial letter to the expectant father.

The letters are written in an informal, conversational style and emphasize the importance of proper medical care throughout pregnancy. Request cards for the series can be secured by physicians from their local health department or directly from the Michigan Department of Health.

JEAN PAUL WORTH

(Continued from Page 451)

men in his area over a pet peeve—false information about patients in the public press.

An ardent woodsman and hunter, Worth spends his free hours at his hunting camp on the Big Cedar River in Menominee County. His favorite pastimes are painting landscapes in oil, splitting wood, or hunting.

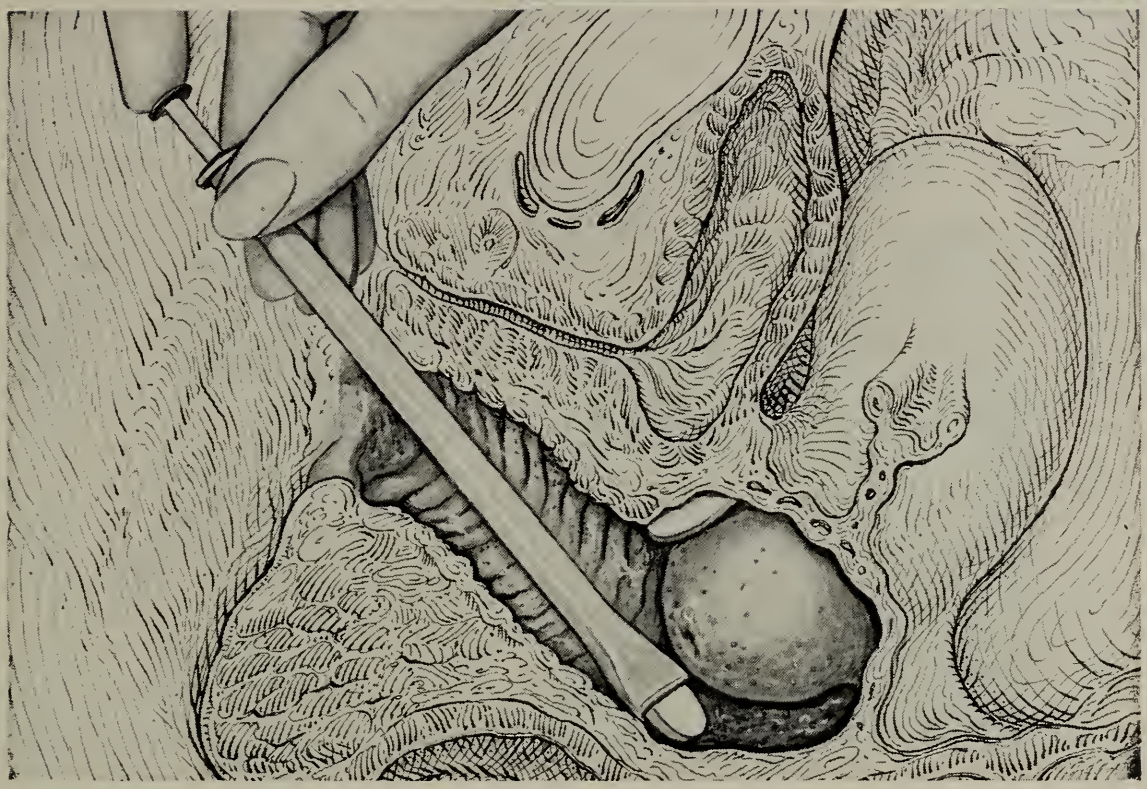
He also finds time for civic affairs. He has served on the Board of Education, City Park Board, Library Board, and has been active in lay educational activities as a member of the state advisory committee of the Community School Service Program.

A top flight newspaperman, he was promoted a year ago to Editor of the *Escanaba Daily Press* in Escanaba and thus also became affiliated with Russell papers in Marquette and Iron Mountain, the three largest daily papers in Michigan's Upper Peninsula.

Jean Worth is a friend of the medical profession because he knows that doctors are trying to render health service to people as a whole.

William S. Jones, M.D.

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New Intravaginal Applicator for Improved Treatment of Vaginitis

The restorative treatment of vaginitis with Floraquin is now further improved by a new aid to tablet insertion. Faulty insertion is no longer a failure factor in therapy.

The new Floraquin applicator is designed for simplified insertion of Floraquin tablets by the patient. This plunger device, made of smooth unbreakable plastic, places the Floraquin tablets in the fornices and thus assures coating of the entire vaginal mucosa as the tablets disintegrate. The patient inserts two Floraquin tablets with the applicator in the morning and also two tablets at night, with treatment being continued through at least two menstrual periods. During menstruation it is desirable to increase medication to eight tablets daily to combat the alkalinity of the menstrual flow.

Warm acid douches (2 ounces of 5 per cent acetic acid or white vinegar to 2 quarts of warm water) may be taken as often as desired for hygienic purposes.

Floraquin contains Diodoquin® (diiodohydroxyquinoline, U.S.P.), the safe and effective protozoacide and fungicide. Lactose, anhydrous dextrose and boric acid are included to help restore the normal acid pH of the vaginal secretions. Such an acid vaginal medium then encourages the growth of normal flora and makes the environment unfavorable for pathogens.

A Floraquin applicator is supplied with each box of 50 (a new package size) Floraquin tablets. G. D. Searle & Co., Research in the Service of Medicine.

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. NEWS MEDICAL

MICHIGAN AUTHORS

William R. Eyler, M.D., and **Howard P. Doub, M.D.,** Detroit, are the authors of an article entitled "Extra-intestinal Roentgen Manifestations of Intestinal Lipodystrophy," read before the Section on Radiology at the 104th Annual Meeting of the American Medical Association, Atlantic City, June 7, 1955, and published in the *Journal of the American Medical Association,* February 18, 1956.

Homer H. Stryker, M.D., Kalamazoo, is the author of an article entitled "Safe Traction in Children with Fractured Femurs," published in the *Journal of the American Medical Association,* February 4, 1956.

John R. Caldwell, M.D., and **F. Wayne Hollinger, M.D.,** Detroit, are the authors of an article entitled "The Importance of Basal Blood Pressure," published in *Henry Ford Hospital Medical Bulletin,* December, 1955.

Harold F. Schuknecht, M.D., Detroit, is the author of an article entitled "Don't Shout!—I Can Hear!" published in the *Henry Ford Hospital Medical Bulletin,* December, 1955.

Charles Long, II, M.D., Detroit, is the author of an article entitled "Myofascial Pain Syndromes," published in *Henry Ford Hospital Medical Bulletin,* December, 1955.

Edgar A. Kahn, M.D., Ann Arbor, is the author of an article entitled "Congenital Anomalies of the Brain and Spinal Cord," published in the *Henry Ford Hospital Medical Bulletin,* December, 1955.

F. Janney Smith, M.D., Detroit, is the author of an article entitled "The Clinical Cardiovascular Features of Hyperthyroidism," published in the *Heart Bulletin,* November-December, 1955, and reprinted in the *Henry Ford Hospital Medical Bulletin,* December, 1955.

Edward McCall Priest, M.D., Donald G. Remp, Ph.D., Dan H. Basinski, Ph.D., and **Laurie Dickson, M.D.,** Detroit, are the authors of an article entitled "Preliminary Experience with the Glutamic Oxaloacetic Transaminase Determination in Acute Myocardial Infarction in Humans," published in the *Henry Ford Hospital Medical Bulletin,* December, 1955.

John M. Sheldon, M.D., and **Kenneth P. Mathews, M.D.,** Ann Arbor, are the authors of an article entitled "Urticaria: Present Concepts in Etiology and Management," presented by invitation at the 149th Annual Meeting of the Medical Society of the State of New York, Buffalo, Section on Allergy, May, 1955, and published in the *New York State Journal of Medicine,* February 15, 1956.

Lloyd F. Teter, M.D., Pekin, Illinois, formerly of Battle Creek, is the author of an article entitled "A Simple Adjunct in the Treatment of Inguinal Hernia," published originally in THE JOURNAL of the Michigan State Medical Society, a condensation of which is published in *Current Medical Digest,* December, 1955.

Merle Lawrence, Ph.D., and **Phillip A. Yantis, Ph.D.,** Ann Arbor, are the authors of an article entitled "Thresholds of Overload in Normal and Pathological Ears," presented at the session on Hearing Measurements, 31st Annual Convention of the American Speech and Hearing Association, November 17-19, 1954, in Los Angeles, and published in AMA *Archives of Otolaryngology,* January, 1956.

Harry A. Towsley, M.D., Ann Arbor, is the author of an article entitled "The Constipated Infant," published in THE JOURNAL of the Michigan State Medical Society, and condensed in the *Current Medical Digest,* January, 1956.

W. H. Steffensen, M.D., Grand Rapids, is the author of an article entitled "The Technic of Administration of a Local Anesthetic for Repair of Cleft Lip in Infants," published in *The Journal of the International College of Surgeons,* a condensation of which appears in the *Digest of Ophthalmology and Otolaryngology,* December, 1955.

Phillip A. Yantis, Ph.D., Ann Arbor, is the author of an article entitled "Locus of the Lesion in Recruiting Ears," published in the AMA *Archives of Otolaryngology,* December, 1955.

Claire L. Straith, M.D., D.D.S., F.A.C.S., F.I.C.S., D.A.B., Detroit, is the author of an article entitled "Principles of Plastic Surgery in Industry," read at the Twentieth Annual Congress of the United States and Canadian Sections, International College of Surgeons, Philadelphia, September, 1955, and published in *The Journal of the International College of Surgeons,* January, 1956.

Mathew Alpern, Ph.D., Ann Arbor, is the author of an article entitled "Testing Distance Effect on Phoria Measurement at Various Accommodation Levels," published in the AMA *Archives of Ophthalmology,* December, 1955.

John T. Ferguson, M.D., and **William H. Funderburk, Ph.D.,** Traverse City, are the authors of an article entitled "Improving Senile Behavior with Reserpine and Ritalin," published in *The Journal of the American Medical Association,* January 28, 1956.

J. W. Rae, Jr., M.D., and **L. F. Bender, M.D.,** Ann Arbor, are authors of an original article "Treatment of

(Continued on Page 456)

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Multiple Compressed Tablets of 'Co-Deltra' and 'Co-Hydeltra' are designed to help the physician cope with the problem of gastric distress which might otherwise become an obstacle to therapy with the newer steroids prednisone and prednisolone. Each Multiple Compressed Tablet is specifically formulated as a "tablet within a tablet" to provide stability and to release in sequence antacid and anti-inflammatory components.

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(Continued from Page 454)

Patients with Rheumatoid Arthritis by Physical Means" which appeared in JAMA February 25, 1956.

W. R. Eyler, M.D., and **H. P. Doub, M.D.,** Detroit, are authors of an original article "Extraintestinal Roentgen Men of the Stations of Intestinal Lipodystrophy" which appeared in JAMA February 18, 1956.

Manuel Rodriguez-Gomez, M.D., Antonio Valdes-Rodriguez, M.D., and **A. L. Drew, M.D.,** of Ann Arbor, are authors of an original article "Effect of Zoxazolamine (Flexin) in Treatment of Spasticity" which appeared in JAMA of March 3, 1956.

* * *

News comment from Carey P. McCord, M.D., Editor, *Industrial Medicine and Surgery:*

"John E. Summers, M.D., Grand Rapids, in the Journal of the Michigan State Medical Society for January, 1956, has a detailed and well-written account of the McIntyre-Saranac Conference on Occupational Chest Diseases held February 6-8, 1955, at Saranac Lake, New York.

"Only rarely is a national conference on occupational diseases or any other facet of occupational health favored with lengthy reporting in state medical journals or any medical publications besides those in the field of industrial medicine. Dr. Summers' report is the exception and the reporting is exceptional. The pronouncements at Saranac Lake based upon elaborate laboratory and clinical investigations hold significant newness for all industrial physicians. Appearance in the Journal of the Michigan State Medical Society of this full scale and accurate article provides heartening recognition that in our present-day American culture, every physician is an industrial physician."

* * *

George L. Waldbott, M.D., Detroit, has been invited as the guest of honor for the Third Congress of Allergists and Asthma at Dresden, Germany, in June, 1956.

* * *

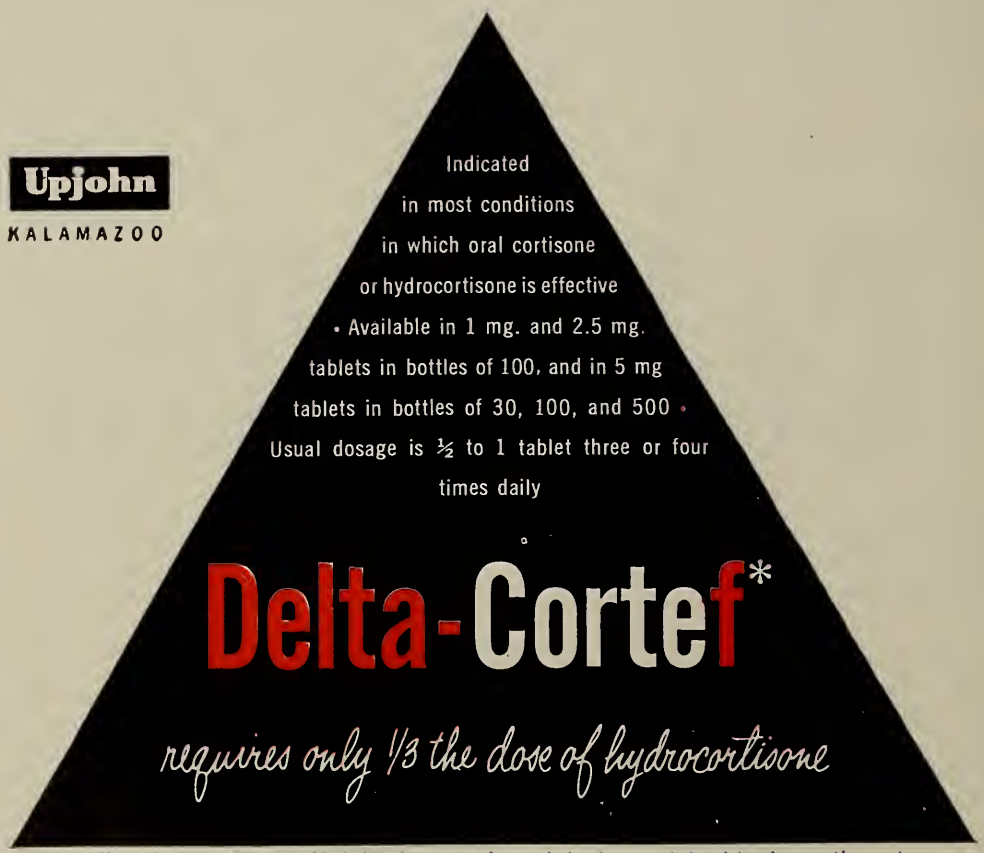
The American Society for Surgery of the Hand held its eleventh annual meeting in Chicago, January 27, 1956, with more than 900 surgeons registered.

Scientific papers were presented by Drs. Robert E. Carroll, L. Ramsay Straub, Edward H. Wilson, Ernest W. Lampe, Herbert Conway, John Bouve, J. William Littler, William Metcalf and William Whalen, New York; Julian M. Bruner, Des Moines; Henry C. Marble, Boston; Bland W. Cannon, Memphis; Carruth J. Wagner, San Francisco; Robert H. Clifford, Detroit; Richard S. Oakey Jr., Philadelphia, andw Darrel T. Shaw, Cleveland.

* * *

Selective Service Director Lewis B. Hershey has issued a warning to the nation's hospitals against appointment of draft-vulnerable physicians to residency posts. Here is the situation: Some 4,500 young doctors subject to military call are due to complete internships in July. Estimating that 500 will be physically unqualified and 500 will receive Defense Department deferment for resi-

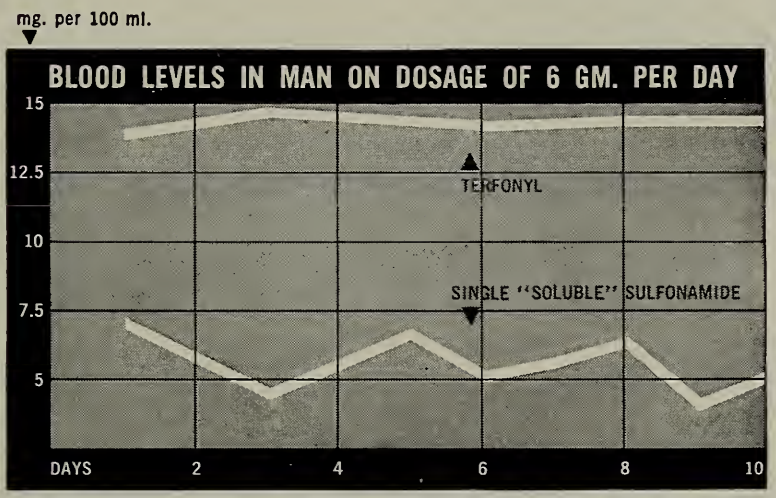
(Continued on Page 458)



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– After Lehr, D., Modern Med. 23:111 (Jan. 15) 1955.

Terfonyl is absorbed as well as single "soluble" sulfonamides, but is eliminated at a slower rate. For this reason, Terfonyl blood levels are much higher.

In experimental infections (Klebsiella, Pneumococcus, Streptococcus), Meth-Dia-Mer sulfonamides have been shown to be from three to four times more effective on a weight basis than single "soluble" sulfonamides.

Toxicity is minimal because normal dosage provides only one-third the normal amount of each sulfonamide. The body handles each component as though it were present alone, although therapeutic effects are additive.

Terfonyl Tablets, 0.5 Gm., bottles of 100 and 1000.
Terfonyl Suspension, 0.5 Gm. per 5 ml., pint bottles.

0.167 Gm. each of sulfamethazine, sulfadiazine and sulfamerazine per tablet or per 5 ml. teaspoonful of suspension.

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(Continued from Page 456)

dency training, that leaves 3,500 potentially available for draft callup. But armed forces will need 4,600 replacements in fiscal year beginning July 1 (exclusive of USPHS needs). That leaves a deficit of 1,100 to be plucked from remnants of Priorities I and II and the large pool of Priority III's (non-veterans).

General Hershey is, in effect, putting teaching hospitals on notice that they run risk of losing first, second or third-year residents up to age 46 if these men are subject to induction. "Neither the hospitals nor the individual physicians involved would be justified in protesting a call to military service," he declared.

As of December 31, 1955, there were only 176 doctors in Priorities I and II combined who were classified in 1-A and physically fit for military service. Note: Defense Dept. soon may send a requisition to Selective Service for its first physician inductees of 1956, for activation in second half of this year.

* * *

The Jackson County Cancer Society and the Jackson County Medical Society will conduct a symposium on common practices in Diagnosis and treatment at Hotel Haues, 2 p.m., April 26, 1956. The session will consist of a panel discussion moderated by F. A. Coller, M.D., Chairman of the Department of Surgery, University of Michigan Medical School. The panelists will be:

1. A. C. Curtis, M.D., Professor of Dermatology and Syphilology, University of Michigan
2. Isadore Lampe, M.D., Professor of Radiology, University of Michigan
3. James H. Maxwell, M.D., Professor of Otolaryngology, University of Michigan
4. Howard H. Cummings, M.D., Professor Emeritus, Post Graduate Medical College, University of Michigan
5. Reed M. Nesbit, M.D., Professor of Surgery, University of Michigan.

At 4 p.m., there will be a coffee break followed by a question-and-answer period.

The evening session will begin with cocktails at 6 p.m., followed by a banquet at 7 p.m.

The main speaker for the evening will be Alton Ochsner, M.D., Professor of Surgery and Chairman of the Department of Surgery, Tulane University, whose subject will be "Cancer of the Stomach."

The fee for the afternoon and evening session will be $10.00 including cocktails and dinner.

* * *

Eleventh Annual Schering Award—Devoted to research and the communication of knowledge in the medical profession, the Schering Award has begun its eleventh annual program for medical students in the United States and Canada.

Students are invited to participate by selecting one of three suggested subjects and submitting papers to the Schering Award Committee, Bloomfield, N. J. Both a $500 first prize and $250 second prize are offered for

(Continued on Page 460)



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Since the newborn infant has very little ability to digest starchy foods, the carbohydrate requirements of the formula-fed baby are best met with a milk modifier which places a minimum demand on the digestive system.

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- basically **different** in chemical structure, extending the therapeutic choice in organic mercurials

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1. Pollock, B. E., and Pruitt, F. W.: Am. J. M. Sc., 226:172, 1953.

THE G. A. INGRAM COMPANY
4444 Woodward Avenue, Detroit 1, Mich.

(Continued from Page 458)

each of the three subjects. Decisions are made by a group of judges who are authorities in their respective fields. In addition, every participant in the contest receives a professionally useful gift.

The three subjects for 1956, announced by C. J. Szmal, M.D., chairman of the Schering Award Committee, are:

1. "The Clinical Use of Adrenocortical Steroids in Collagen Diseases"
2. "Metabolic Aspects of the Aging Process"
3. "New Applications of Antihistamines in Medicine and Surgery"

Literature and entry forms are being distributed in the medical schools. Students who are interested in participating, either individually or in teams, should submit their entry forms before July 1, 1956, and manuscripts must be postmarked not later than Sept. 30, 1956.

* * *

Professor Roberto Caldeyro-Barcia, who holds the Chair in Obstetric Physiology at the University of Montevideo, Uruguay, will visit Wayne University College of Medicine, under the auspices of the Department of Obstetrics and Gynecology, and Detroit Receiving Hospital, on the gynecology service, from Monday, April 30, through Friday, May 4. Doctor Caldeyro will present a series of five lectures on *Physiology, Physiopathology, and Pharmacology of Uterine Contractility and Their Applications to Obstetric Practice.*" These lectures will be given at 4 p.m. on each of the five days of his visit, Monday through Friday, in the auditorium of the Mullett Street building of Wayne University College of Medicine. Doctor Caldeyro is the world authority on the recording and measurement of uterine contractility in humans and has utilized the accurate method of implanting a tiny balloon through a large needle in the actual uterine wall. The balloon is connected to a small polyethylene catheter and the system is filled with sterile saline solution for recording purposes on a drum. The titles of the lectures are as follows:

1. "Methods of Studying Uterine Contractility and Normal Contractile Waves."
2. "Studies of Abnormal Contractile Waves and Uterine Hypertonicity."
3. "Uterine Contractility in Normal and Abnormal Labor; the Effect of Contractions on Uterine Blood Flow."
4. "Pharmacological Basis for the Management and Induction of Labor."
5. "Uterine Contractility in the Third and Fourth Stages of Labor."

All physicians, residents, interns, and workers and students in the basic sciences are welcome to attend this very important series of lectures which embody one of the most basic contributions to the field of mammalian reproduction in recent years.

Say you saw it in the Journal of the Michigan State Medical Society

Leon DeVel, M.D., MSMS Rheumatic Fever Coordinator, addressed the Rotary Club of Cadillac on February 21. His subject was "The Michigan Rheumatic Fever Control Program."

* * *

Cancer Registry.—A properly functioning registry of cancer patients is a requirement for approval of a hospital's cancer program by the American College of Surgeons, under new regulations which were made effective after the first of the year. The requirements recognized three types of cancer programs:

1. The specialized cancer hospital providing complete service for cancer patients.
2. The general hospital conducting organized cancer clinical activities, including cancer registry, cancer consultation and treatment service.
3. The general hospital, usually small in size, which maintains only a registry of all cancer patients.

All three types of program must be under the supervision of a cancer committee of the hospital's medical staff consisting of physicians directly concerned with the diagnosis and treatment of cancer and appointed by regularly established medical staff authorities.

A total of 625 hospitals is now included in the list of those approved by the College.

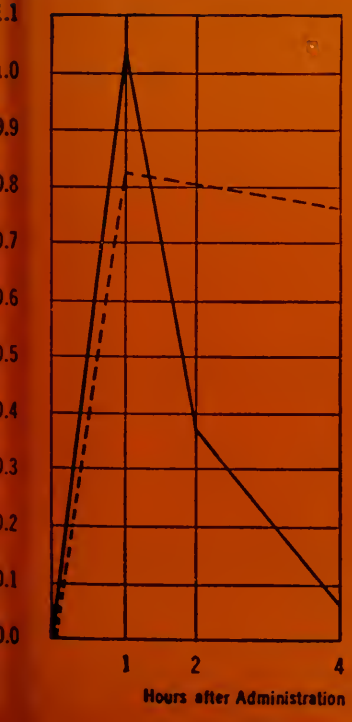
* * *

Harry M. Nelson, M.D., Detroit, has appointed Leon E. Briggs, Treasurer of Ford Motor Company, as General Chairman of the 1956 Cancer Crusade of the American Cancer Society's Southeastern Michigan Division. The cancer drive will be conducted in April.



Two colleagues extended congratulations to Dr. Samuel W. Donaldson (*center*) Ann Arbor, Michigan, following his receipt of the coveted Gold Medal of the American College of Radiology, at the annual meeting of the College held recently in Chicago. Dr. Wilbur Bailey (*left*) Los Angeles, California, incoming President of the College, assisted Dr. Warren W. Furey, (*right*) Chicago, Illinois, in placing of the Medal. Dr. Donaldson is director of the department of radiology at St. Joseph's Hospital, Ann Arbor, and was awarded the Gold Medal for his outstanding contributions to the art and science of radiology.

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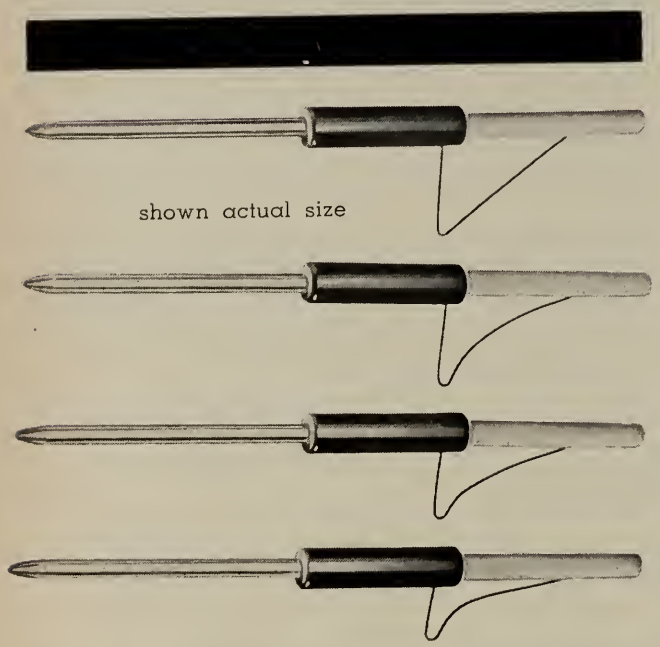
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**Described in his paper which will be sent on request*

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The American College of Chest Physicians will hold its 22nd Annual Meeting at Hotel Sherman, Chicago, June 6-10, 1956. For program and information, write the College at 112 East Chestnut Street, Chicago 11, Illinois.

* * *



Walter H. Winchester, M.D., of Flint, Michigan's Foremost Family Physician for 1955, was signally honored by the Genesee County Medical Society on the anniversary of his 81st birthday, January 23, 1956.

Eulogies on the important life work and accomplishments of Doctor Winchester were offered by L. Fernald Foster, M.D., of Bay City, who spoke of him as a physician; Grover C. Penberthy, M.D., Detroit, who outlined Doctor Winchester's experience as a soldier; Richard L. Rapport, M.D., of Flint, who spoke of Doctor Winchester as a medical pioneer; Reverend Franklin D. Elmer, Jr., who recounted the civic activities of Doctor Winchester; and Dean A. C. Furstenberg, M.D., of Ann Arbor, who outlined accomplishments and improvements in service to patients occurring during the fifty-three years during which Dr. Winchester practiced in Flint.

L. O. Shantz, M.D., President of Genesee County Medical Society, presided at the meeting which was attended by more than 500 of Dr. Winchester's friends.

* * *

The Michigan Regional Committee on Trauma of the American College of Surgeons was presented with the blue ribbon symbolic of the most activity of any state trauma committee, at the recent 34th Annual Meeting of ACS Committee on Trauma, held in Cincinnati.

Congratulations to the Michigan Trauma Committee and particularly to its immediate past-chairman, Vernon C. Abbott, M.D., of Pontiac, who presented the annual report of his committee in a finely documented book.

* * *

Neuromuscular Diseases of Children.—The Cook County Graduate School of Medicine announces a two-week intensive course in Neuromuscular Diseases of Children with special emphasis on cerebral palsy, to be given by Meyer A. Perlstein, M.D., for the two-week period of June 18 to 29. This is an intensive, didactic, and clinical course designed for pediatricians, orthopedists, neurologists, and physiatrists interested in the care and treatment of children with neuromuscular handicaps. Emphasis will be placed on the practical clinical aspects of treatment and rehabilitation procedures. The course will include several field trips to demonstration clinics, and treatment centers. The fee for the course, which is $225, includes the cost of luncheons as well as the various trips. Registration in the course is limited. For further information, write to John W. Neal, Registrar, Cook County Graduate School of Medicine, 707 S. Wood Street, Chicago, Illinois.

(Continued on Page 464)



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(Continued from Page 462)



Milton A. Darling, M.D., is Chairman of Arrangements for the 91st Annual Session of the Michigan State Medical Society, to be held at the Sheraton-Cadillac Hotel in Detroit on September 26-27-28, 1956.

Dr. Darling is President of the Wayne County Medical Society, a longtime Delegate from Wayne County to the MSMS House of Delegates and active in scientific and socio-economic affairs of Michigan medicine.

Congratulations, Dr. Darling!

* * *

C. Allen Payne, M.D., Grand Rapids, was guest speaker at the Sixth Annual County Society Officers Conference of the Kentucky State Medical Association, in Lexington, March 29.

* * *

Mrs. Guy L. (Josephine H.) Kiefer, founder of the Woman's Auxiliary to the Michigan State Medical Society in 1926, died February 26, 1956, in Port Huron, after a long illness.

Mrs. Kiefer was the first President of the Woman's Auxiliary, also organizer and first President of the Michigan State Club of Lansing, where she lived from 1927 until 1955 when she moved to Port Huron.

Surviving Mrs. Kiefer are two daughters, Mrs. Duval Laurie of Port Huron and Mrs. Homer C. Bayliss of Detroit; and two grandchildren, Guy K. Laurie, M.D., of Petoskey, and Mrs. Martin Owens, Jr., Port Huron.

* * *

The American Cancer Society and the National Cancer Institute of the U. S. Public Health Service are jointly sponsoring the Third National Cancer Conference in Detroit June 4-5-6. For information and program, write Harry M. Nelson, M.D., 1067 Fisher Building, Detroit, Chairman of Michigan Committee on Arrangements.

* * *

Margaret H. Zolen, M.D., of Kalamazoo, was named "Woman of the Year" by the American Businesswomen's Association at its recent convention in St. Louis.

A panel of judges made the selection on the basis of community accomplishments, outside activities, unusual hobbies and interests and choice of career.

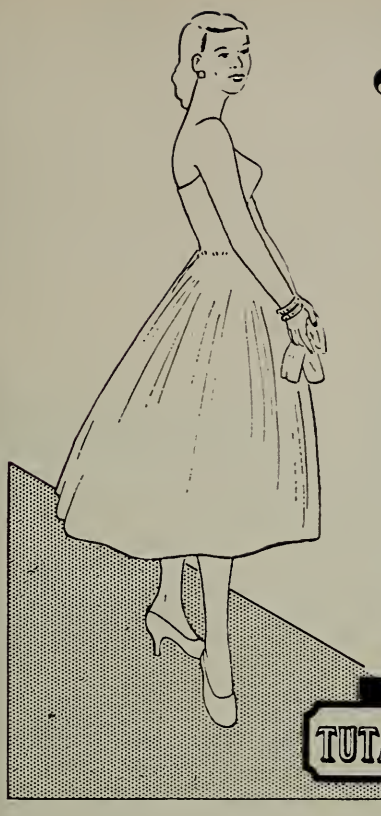
Congratulations, Dr. Zolen!

* * *

Earl E. Weston, M.D., Detroit, assumed the presidency of the Michigan Industrial Medical Association at the close of its annual meeting in Lansing on March 1, succeeding Paul J. Ochsner, M.D., who retired after serving the Society as its chief officer during the past year.

Millard Shellman, M.D., of Grand Rapids, was chosen as President-Elect; Theodore Roth, M.D., of Detroit, Vice President, and Duane Block, M.D., Detroit, Secretary-Treasurer.

(Continued on Page 466)



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We know that today's physician recognizes the many-sided nature of the disease—Alcoholism. Beyond the physical, which requires expert treatment in itself, the alcoholic's physician is plagued, we know, with the equally vital aspects, which make demands on his time and attention, of the emotional, spiritual and mental sickness he notes in his patient.

We believe that Brighton Hospital offers the answer. Physicians can now send their alcoholic patients to Brighton with the certain assurance that they will find expert medical and nursing attention AND that, if they so desire, patients will be thoroughly indoctrinated with the program of Alcoholics Anonymous.

BRIGHTON HOSPITAL is NOT interested in the patient who merely wishes to be dried out in order to resume drinking. We ARE interested in those patients who really, fervently, seek complete rehabilitation and a way of life FREED from alcohol.

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DOCTORS, we are here to serve you. We are here to serve your patients.

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(Continued from Page 464)

MSMS members **J. P. Bertucci, M.D.,** of Ishpeming, **Walter E. Mercer, M.D.,** of East Lansing, and **O. D. Stryker, M.D.,** of Mt. Clemens, were reappointed by Governor G. Mennen Williams as members of the Michigan State Board of Registration of Medicine.

Congratulations!

* * *

A summer camp for diabetic children will be opened for the eighth season under the auspices of the Chicago Diabetes Association, Inc., from July 15 to August 5, 1956, at Holiday Home, Lake Geneva, Wisconsin.

In addition to the complete camp personnel, the Chicago Diabetes Association furnishes a staff of resident physicians and dietitians, trained in the care of diabetic children.

Boys and girls, aged eight through fourteen years, are eligible. For further information regarding fees, interested persons should be directed to write or telephone the office of the Chicago Diabetes Association. Fees will be set on a sliding scale to meet individual circumstances.

Physicians are urged to notify parents of diabetic children and to enter the names of children who would like to attend camp. Applications may be obtained from, and inquiries should be addressed to The Chicago Diabetes Association, 5 South Wabash Avenue, Chicago 3, Illinois. Telephone Andover 3-1861.

Limited capacity requires prompt application.

John G. Bielawski, M.D., Medical Director of the Michigan Heart Association, recently was elected President of the Staff Conference of Heart Associations at the New Orleans meeting of the Conference. This organization consists of approximately 400 members throughout the country and has as its main objective the interchange of experiences and development of mutual understanding among the Board members and staff of the American Heart Association and the staff of affiliates and charter heart associations.

Congratulations, Dr. Bielawski!

* * *

The American Goiter Association will hold its annual meeting at the Drake Hotel, Chicago, May 3-4-5, 1956. Included in the program are the following Michigan physicians: W. H. Beierwaltes, M.D., D. R. Korst, M.D., N. S. Hiramoto, M.D., all of Ann Arbor, and B. E. Brush, M.D., M. A. Block, M.D., and J. M. Miller, M.D., of Detroit.

* * *

The Permanence of a Tax!—The tower of St. Eloi in Nevers, France, was built by levying in the year 1358 a tax on all food consumed in the town. The tower was completed 597 years ago and now is a crumbling ruin—yet the tax is still being collected!!!

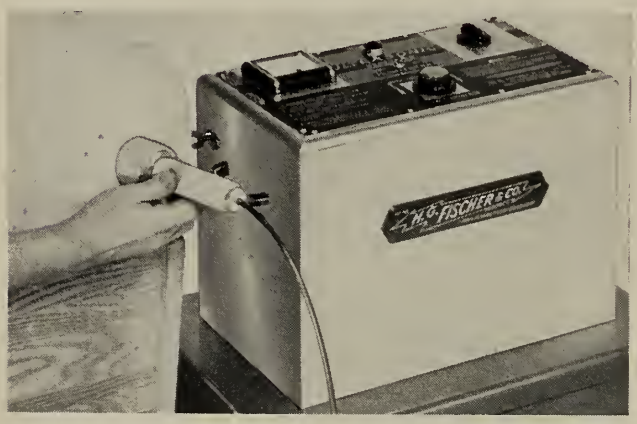
* * *

Michigan's two medical schools received more than $80,000 in grants during 1955 from the National Fund

(Continued on Page 468)

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(Continued from Page 466)

for Medical Education. Altogether NFME awarded grants amounting to $2,657,433 to the nation's eighty-one medical schools last year.

In 1955, the University of Michigan Medical School received $53,018 from NFME, and Wayne University College of Medicine received $27,359. Since 1951, the University of Michigan has received a total of $169,385 from the National Fund, and Wayne, $108,879. Nationwide, NFME's grants for 1955 were 22 per cent greater than in the preceding year and the largest in the history of the organization.

Since 1951, when the first grants were awarded, the nation's medical schools have benefited by a total $9,589,490.

Of the 1955 grant, 58 per cent was contributed by corporations through the NFME Committee of American Industry, and the balance by physicians through the American Medical Education Foundation. Fund grants are unrestricted except for the provision that they cannot be used for building purposes. The money is used by the schools primarily to hold their teachers, fill faculty vacancies, and open new courses in areas of recent scientific progress.

In announcing its 1955 totals, NFME emphasized that the situation is still critical, even with the $90,000,000 endowment gift to privately supported medical schools announced recently by the Ford Foundation. NFME points out that the needs of the nation's eighty-one medical schools for additional annual income have been variously estimated as from 10 to 40 million dollars.

(Continued on Page 470)

MEDICAL TELEVISION SHOWS

Produced by Michigan Health Council

Date—1956	*Station*	*Subject*	*Guests*
February 2	*WKAR-TV, East Lansing*	Rural Health	Marjorie Karker, Lansing
February 5	WJBK-TV, Detroit	Cholesterol and Heart Disease	James M. Ryan, M.D., Detroit
February 9	*WKAR-TV, East Lansing*	Children's Dental Health Week	Robert L. Overholt, D.D.S., Lansing
February 12	WJBK-TV, Detroit	Heart Surgery	James D. Fryfogle, M.D., Detroit
February 16	*WKAR-TV, East Lansing*	Local Health Departments	J. K. Altland, M.D., Lansing
February 19	WJBK-TV, Detroit	Tuesday's Child	
February 23	*WKAR-TV, East Lansing*	No Program Scheduled	
February 26	WJBK-TV, Detroit	Tuberculosis Film	A Film

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*Krantz, J. C., Jr., and Carr, C. J.: The Pharmacologic Principles of Medical Practice, ed. 3, Baltimore, The Williams and Wilkins Company, 1954, p. 998.

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(Continued from Page 468)

DOCTOR LOCATIONS

Through February 29, 1956

Placed by Michigan Health Council	*Opened Practice in*	*Approximate Date*
Osvaldas Nakas, M.D.	Buchanan	February 15
Martin F. Bruton, M.D.	Detroit (Chrysler)	April 1
Assisted by Michigan Health Council		
Kenneth W. Yost, M.D.	Marysville	January 31
Seymour B. Ekelman, M.D.	Mt. Pleasant	January

* * *

Scholarships to the Midwest Institute on Alcohol Studies to be held at Madison, Wisconsin. June 18-22, 1956, have been made available by the Michigan State Board of Alcoholism. The Institute, cosponsored by the University of Wisconsin and Western Michigan College in co-operation with the Michigan State Board of Alcoholism and the Wisconsin Committee on Alcoholism, is designed to equip professional people with a better knowledge of alcoholism, alcohol education, and problems related to alcohol. The scholarships provide room, board, tuition, and registration.

Deadline date for final application is April 30. Those wishing additional information are requested to write to George Nimmo, Educational Director, Michigan State Board of Alcoholism, Post Office Box 686, Lansing, Michigan.

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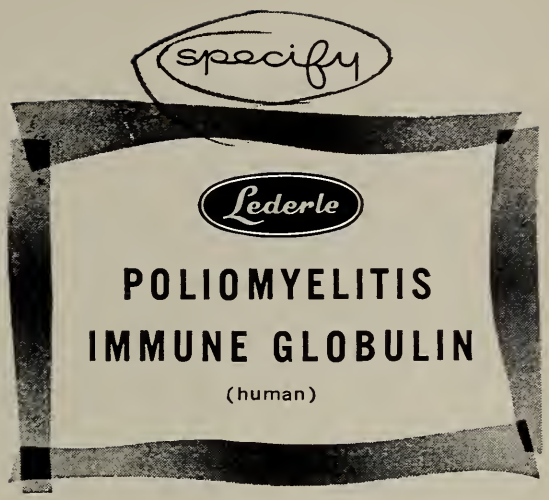
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STARTING DATES—SPRING-SUMMER, 1956

SURGERY—Surgical Technic, two weeks, April 30, May 14
Surgical Anatomy and Clinical Surgery, two weeks, June 18
Surgery of Colon and Rectum, one week, May 7, June 18
General Surgery, two weeks, April 23
Thoracic Surgery, one week, June 4
Esophageal Surgery, one week, June 11
Breast and Thyroid Surgery, one week, June 18
Gallbladder Surgery, ten hours, June 25
Fractures and Traumatic Surgery, two weeks, June 18
Varicose Veins, ten hours, April 30, June 18
GYNECOLOGY — Office and Operative Gynecology, two weeks, April 16, June 18
Vaginal Approach to Pelvic Surgery, one week, April 30, June 11
OBSTETRICS—General and Surgical Obstetrics, two weeks, May 7
MEDICINE—Internal Medicine, two weeks, May 7
Electrocardiography and Heart Disease, two weeks Basic Course, July 9
Gastroscopy and Gastroenterology, two weeks, September 10
Dermatology, two weeks, May 7
RADIOLOGY—Diagnostic X-ray, two weeks, April 30, September 17
Clinical Uses of Radioisotopes, two weeks, May 7
PEDIATRICS—Intensive Review Course, two weeks, May 14
Neurological Diseases: Cerebral Palsy, two weeks, June 18
UROLOGY—Two-week course, October 8
Cystoscopy, ten days, by appointment

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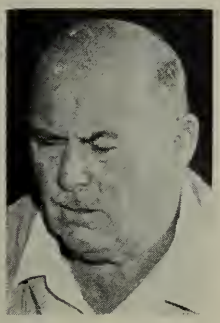
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©1956, by Michigan State Medical Society.

Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 14, Minnesota.

Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, $6.00; single copies, 60 cents. Additional postage; Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year.

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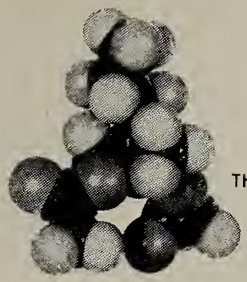
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HIGHLIGHTS OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of March 9, 1956

- **President Jones** reported on the February 23-24 meeting with Veterans Administration officials re continuance of the "Home Town Medical Care" Program for Veterans. The President reported that VA will reconsider the proposed discontinuance of this successful program in Michigan.
- **Committee Reports.**—The following were given consideration: (a) Iodized Salt, meeting of February 8; (b) Maternal Health Committee, February 22; (c) Mental Health Committee, February 29; (d) Hospital Relations Committee, February 29; (e) Rheumatic Fever Control Committee, February 29; (f) Committee on Prevention of Highway Accidents, March 1. Also briefed by Chairman W. B. Harm, M.D., was the February 22 meeting of the Committee on Arrangements for the March 8 Testimonial Luncheon.
- **A letter of congratulations** to the Hawaiian Medical Society on its Centennial (April 22-29, 1956) was authorized.
- **An "Atlas of Diseases of the Chest,"** proposed by the Chairman of the Tuberculosis Control Committee, was approved. The financial sponsorship is to be assumed by the Michigan Tuberculosis Association.
- **Letter from Governor G. Mennen Williams** asking for opinion on the health proposals he placed before the 1956 Legislature was referred to President Jones for reply.
- **Beaumont Memorial**—A letter to Governor Williams from the chairman of the MSMS Beaumont Memorial Committee, Otto O. Beck, M.D., Birmingham, was approved.
- **M. A. Darling, M.D.**, Detroit, President of the Wayne County Medical Society, was chosen as official MSMS representative to the Michigan State Dental Association Centennial meeting, Detroit, April 15-19.
- **1956 Michigan Clinical Institute.**—Chairman D. Bruce Wiley, M.D., reported the attendance as 2,477, including 1,403 doctors of medicine, 401 guests, 376 exhibitors, and 277 operating room supervisors. The Executive Committee of The Council expressed thanks to all who contributed in any way to the success of the MCI, especially General Chairman L. W. Hull, M.D., Program Chairman Wm. S. Reveno, M.D., and Testimonial Luncheon Chairman W. B. Harm, M.D., all of Detroit.
- **Legal Counsel J. Joseph Herbert** presented a report of the Kopprasch case (Allegan County), and upon the legal phases in an ethical matter arising in Southeastern Michigan.
- **R. W. Teed, M.D.**, Ann Arbor, was appointed as MSMS representative to the Advisory Council of the University of Michigan Chapter of Student AMA.
- **Matters of mutual interest** were presented by Michigan Health Commissioner A. E. Heustis, M.D.
- **The Secretary** was instructed to inform all committees that they shall clear all their recommendations—especially those having legislative import—through The Council or its Executive Committee before final action is taken by committees, or before a member of a committee appears before a legislative body to represent the Michigan State Medical Society.

PRINCIPLES TO GUIDE RELATIONSHIP BETWEEN PHYSICIANS AND HOSPITALS

Report of Joint Committee of Boards of Trustees of American Medical Association and of American Hospital Association, 1953

1. The general purpose of hospitals and physicians is to aid each other in the delivery of the best possible medical care to patients. To attain such a purpose requires full co-operation among medical staffs, governing boards and administrative heads of hospitals. One important method of attaining this objective is that duly designated representatives of the medical staff shall have free and direct access to the governing board with due consideration to the position of the administrator as chief executive officer of the hospital. The various methods by which the medical staff may have access to the hospital governing board follow. These methods are not listed in the order of their desirability, and there may be other acceptable liaison plans developed depending upon local conditions.

(a) The executive committee of the medical staff and a committee of the governing board with the hospital administrator can serve as a joint committee.

(b) Representatives of the medical staff can serve as members of the medical staff committee of the governing board with the hospital administrator.

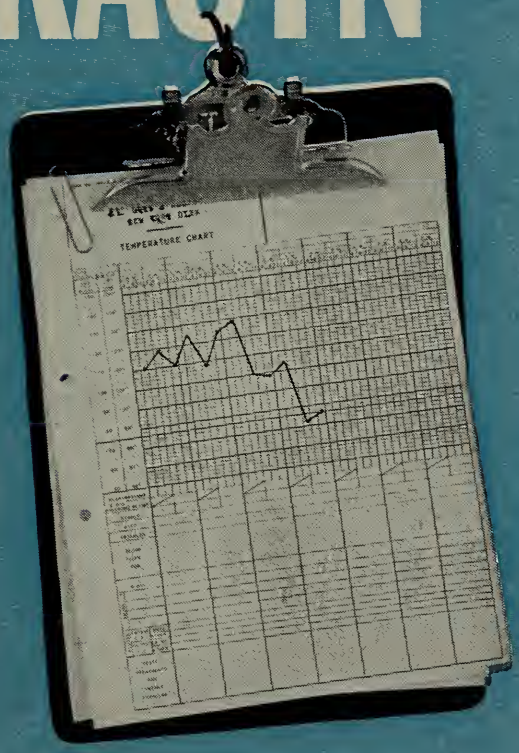
(c) Representatives elected by the medical staff can attend meetings of the hospital governing board.

(d) Members of the medical staff can be members of the hospital governing board.

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2. The professional evaluation of chiefs of service and members of the medical staff should be the responsibility of the medical profession. The method of selection of these individuals must be subject to local arrangement and local conditions. In any such arrangement, however, the principle of the freedom of the staff to make recommendations, subject to the approval of the hospital governing board, should be recognized.

3. The medical profession and the hospitals recognize that certain special services, such as, anesthesiology, pathology, radiology, and physical medicine are integral parts of the practice of medicine and of the services necessary for hospital patients. Physicians in these fields should have the professional status of other members of the medical staff. Chiefs in these specialties must assume also the administrative responsibilities and relationships customarily associated with such positions.

4. The right of an individual to develop the terms of his services on the basis of local conditions and needs is recognized but such contractual arrangements should in all cases ensure (a) the policy of professional incentive for the physician, and (b) progressive development of the hospital departments involved, in order that increasingly improved services to patients may be rendered. Moreover, a physician shall not dispose of his professional attainments or services to any hospital, lay body, organization, group, or individual, by whatever name called, or however organized, under terms or conditions which permit exploitation of the patient, the hospital, or the physician.

5. The chief of a hospital department may have access to financial information regarding his department.

6. It is desirable that means should be provided at local, state and national levels for review of problems of individual hospital-physician relationhsip by organized medical and hospital groups.

USPHS RESERVE

The Surgeon General of the United States Public Health Service, Dr. Leonard A. Scheele, has announced that qualified physicians and other professional health personnel actively engaged in public health practice and preventive medicine are being encouraged to apply for commissions in the Service's expanding Commissioned Reserve.

Dr. Scheele said the Commissioned Reserve is being expanded to increase the nation's readiness to meet the unusual public health demands of national emergencies and that the Public Health Service is interested in encouraging greater participation in the program by professional groups. Physicians, nurses, sanitary engineers, and dentists make up the majority of officers now in the Commissioned Reserve.

In the event of national emergencies, the Surgeon General explained, the Commissioned Reserve, composed of qualified professional health personnel, would have the opportunity of serving their country in the capacities for which their professional training and experience have fitted them.

Commissioned Reserve officers will be called for emergency duty primarily to reinforce the staffs of official State and local health agencies and to augment the Public Health Service operating staff.

Dr. Scheele also pointed out that no Commissioned Reserve officer will be called to emergency active duty, with the exception of volunteers, unless the situation is publicly recognized as requiring such action.

Expansion of the Commissioned Reserve began approximately 18 months ago as the result of a delegation of authority from the Federal Civil Defense Administration. The delegation authorized the Public Health Service to proceed on three main fronts: Intensify research on the detection and control of diseases associated with major national disasters; develop a program to assist State and local health departments in emergency restoration of basic health services; expand and reorganize the Commissioned Reserve for rapid mobilization in the event of enemy attack or other national crisis.

All interested personnel are invited to write to the Surgeon General, Public Health Service (DP), Washington 25, D. C., for information about the Commissioned Reserve.

SALK POLIO VACCINE

On March 13, 1956, the Surgeon General of the U. S. Public Health Service issued a statement endorsing the postponement of "booster shots" as a temporary measure "to enable more children to receive first or second doses and thus extend protection to more people before this summer's poliomyelitis season."

On the basis of reports from manufacturers and the Surgeon General of the U. S. Public Health Service concerning estimated vaccine production, it is believed that an adequate supply should be available for distribution before the seasonal advent of poliomyelitis in different regions of the United States. How much of this will get in the hands of private physicians is variable, depending upon decisions of state and local health authorities and their advisory committees.

If the anticipated supply becomes available, it should be about enough to provide a high degree of protection against paralytic poliomyelitis before the 1956 polio season to all children in the most

(Continued on Page 496)

vasorelaxation
more tissue oxygen
improved muscle metabolism
pain relief
well tolerated • rapid • sustained

walk longer, further, in more comfort



ARLIDIN dilates peripheral blood vessels in distressed muscles, relaxes spasm, increases both cardiac and peripheral blood flow . . . to send more blood where more blood is needed.

effective "vasodilative agent of minimal toxicity and optimal tolerance"[2]

1. Pomeranze, J. et al.: Angiology, June, 1955.
2. Freedman, L.: Angiology 6:52, Feb. 1955.

Write for samples and literature

arlington-funk laboratories
division of U. S. VITAMIN CORPORATION
250 E. 43rd St., New York 17, N.Y.

Protected by U. S. Pat. No. 2,661,372 and 2,661,373

SALK POLIO VACCINE

(Continued from Page 490)

susceptible age groups (six months through fourteen years) and pregnant women who request it. In round numbers, there are approximately 50 million individuals in these categories. At least 10 million and probably 15 million children have already received one or more injections of Salk vaccine. This leaves about 35 million children and some to be vaccinated on an emergency basis before the 1956 polio season.

Granting rapid and equitable distribution and no unanticipated delays in processing and releasing vaccine (which requires a minimum of 120 days), there should be just about enough vaccine to give at least one and usually *two injections* each to 35 million people. Administration of this vast amount of vaccine presents a task of heroic proportions.

The *ideal* dosage schedule currently recommended is: two 1 cc. injections, spaced two to six weeks apart, with a third 1 cc. ("booster") injection given not earlier than seven months later. Ideally, the first two injections should be given immediately after the previous polio season, in the late fall, with the booster injection being administered just before the subsequent polio season. It is easy to see that this is a schedule impossible to follow under the emergency conditions of 1956.

In the future, vaccination against paralytic poliomyelitis, undoubtedly, will become a standard pediatric procedure, with a schedule of injections beginning at six to nine months of age. But we must face the current situation realistically. The effectiveness of the vaccine depends upon the mass of antigen administered and the number and spacing of inoculations.

A compilation of reports from thirty state health officers, evaluating results of the 1955 vaccine program, showed about 79 per cent effectiveness even though three inoculations, as recommended, had *not* been given. This compilation compares experience among 5.2 million unvaccinated children and 4.8 million children who received one or more doses, *but mostly one dose*, of vaccine. Even under the epidemic conditions that prevailed in Massachusetts in 1955, a high rate of protection (60 per cent) against paralytic poliomyelitis was reported from just one dose of the vaccine used in that state.

Other research, still in progress, has revealed this fact—the first injection of vaccine of the potency that prevailed in 1955 did not "take" in about 20 per cent of the children inoculated. However, a substantial percentage of those who fail to acquire antibody on the first injection attain antibody, and a primary sensitization, with a subsequent injection.

POLIO VACCINE ALLOCATED FOR MICHIGAN

Albert E. Heustis, M.D., State Health Commissioner, reports that as of Wednesday, April 18, Michigan had been allocated 1,368,399 doses of polio vaccine for purchase. Together with vaccine supplied earlier by the National Foundation for Infantile Paralysis, this makes a grand total of 2,022,963 doses of vaccine so far for Michigan, most of it already used. This would be approximately the amount needed to give three doses to one-third of the vaccine priority group, which remains children from one through fourteen years of age and pregnant women. The department recommends continued emphasis on the five through nine-year-olds. Because of the shortage of vaccine, the rule governing its distribution was changed on April 12. Under the new rule, vaccine is available only for first and second doses.

AMES AWARD CONTEST

The American College of Gastroenterology, in co-operation with the Ames Company of Elkhart, Indiana, announces the 1956 Ames Award Contest for the best papers in Gastroenterology as follows:

There will be two classes of awards:

1. *Fellows in Gastroenterology, Residents, First or Second-Year Interns*

First Prize—$500.00, a certificate of merit and a one-year subscription to *The American Journal of Gastroenterology*, official publication of the American College of Gastroenterology.

Second Prize—$250.00, a certificate of merit and a one-year subscription to *The American Journal of Gastroenterology*.

2. *Best Paper Published*

For the best paper published in *The American Journal of Gastroenterology*, during the twelve months ending June 30, 1956, for which no prize has been previously awarded, $250.00.

Rules and Regulations

All papers submitted must represent original work in Gastroenterology, must not have been previously published except for abstracts or short preliminary reports and must not have been previously presented at any national meetings.

The contents of the papers can be clinical or basic science. Clinical papers must not be case records, but controlled clinical work.

The length of a paper is no criterion for originality or value.

All entries for the 1956 prizes, with the exception of those already published in *The American Journal of Gastroenterology*, must be typewritten in English, double-spaced on one side of the paper and submitted in six copies.

The winning entries will be selected by the Research Committee of the American College of Gas-

(Continued on page 500)

benefits of prednisone and prednisolone plus positive antacid action to minimize gastric distress...

A reportedly higher incidence of gastric distress in patients receiving the newer steroids prednisone and prednisolone indicates the desirability of co-administering non-systemic antacids.[1]

To help the physician cope with this problem of gastric distress which might otherwise become an obstacle to therapy with the newer steroids . . . Multiple Compressed Tablets 'Co-Deltra' (Prednisone Buffered) and 'Co-Hydeltra' (Prednisolone Buffered) are now available.

'Co-Deltra' and 'Co-Hydeltra' are now available in bottles of 30 on your prescription. Each Multiple Compressed Tablet contains:

Prednisone or Prednisolone, 5 mg.; 300 mg. of dried aluminum hydroxide gel, U.S.P., and 50 mg. of magnesium trisilicate.

'Co-Deltra' and 'Co-Hydeltra' are trade-marks of Merck & Co., Inc.

1. Bollet, A. J., Black, R., and Bunim, J. J.: *J.A.M.A.* **158**: 459, June 11, 1955.

Co-Hydeltra'

Prednisolone Buffered

SHARP & DOHME

Philadelphia 1, Pa.
Division of Merck & Co., Inc.

AMES AWARD CONTEST

(Continued from Page 496)

troenterology and the awards will be made at the annual convention banquet of the College, to be held in New York in October, 1956.

All papers selected for awards become the property of the American College of Gastroenterology and the decision of the judges will be final. Should none of these papers submitted meet the standards set by the Committee, the Committee reserves the right to withhold the making of any award.

The recipient of the first prize will present the paper in person at the annual meeting of the College.

All unpublished entries must be received no later than July 15, 1956, and should be addressed to the Research Committee. American College of Gastroenterology, 33 West 60th Street, New York 23, N. Y.

GOVERNOR'S COMMITTEE TO STUDY OPERATION OF MICHIGAN BLUE CROSS

George E. Bowles, Plymouth, Chairman of Labor Mediation Board.

Mrs. Geraldine Bledsoe, Detroit.

George Broadbent, Director of Farmers Union Insurance Section.

R. C. Buerki, Director of Ford Hospital, Detroit; Vice President, Michigan Hospital Service.

Robert Conder, Vice President, Chrysler Corporation, in charge of Industrial Relations.

Almond Cressman, Michigan State Grange.

Edward L. Cushman, Vice President, American Motors Corporation.

Mrs. Marjorie Gardner, East Lansing, Michigan Farm Bureau.

Dr. Ralph F. Lindberg, Detroit Osteopathic Hospital.

Mrs. Dorothy McAllister, Grand Rapids.

Mrs. Mary Kelly Mullane, Director of Nursing, Cunningham Drug Company, Detroit.

Frank Noakes, Detroit, Secretary-Treasurer, Brotherhood of Maintenance of Ways Employes.

Max Osnos, President, Sam's Inc., Detroit.

E. C. Swanson, Secretary, State Board of Registration in Medicine.

Professor Herbert F. Taggard, University of Michigan.

Leonard Woodcock, Vice President, UAW.

Morton Zimmerman, Unemployment Security Commissioner.

RESOLUTIONS ADOPTED BY MSMS HOUSE OF DELEGATES

September 26-27, 1955

1. RESOLUTION RE BEAUMONT MEMORIAL PRESERVATION

WHEREAS, in Senate Concurrent Resolution No. 34, adopted by both Houses of the Legislature on March 17, 1955, the Michigan Legislature expressed its interest in the Beaumont Memorial on Mackinac Island and recognized the contribution of numerous members of the Michigan State Medical Society in restoring this historic site; and

WHEREAS, the medical doctors of the Michigan State Medical Society sincerely appreciate this compliment, and share with the Legislature and citizens of Michigan a great pride in Mackinac Island State Park as one of our nation's most historic spots, and

WHEREAS, the Mackinac Island State Park is a tourist mecca that, with proper encouragement, will become increasingly popular as an historic area of interest and inspiration to all who visit it, and

WHEREAS, the Michigan State Medical Society, in organizing a campaign for private voluntary contributions from its members to finance restoration of the building which is now Beaumont Memorial, has initiated an idea which could greatly benefit the future historic development of the Mackinac Island State Park by the utilization of funds from sources other than the appropriation of public moneys, and

WHEREAS, the members of the Michigan State Medical Society maintain a continuing interest in the Beaumont Memorial as their own project in the total development of the Mackinac Island State Park, this being evidenced by the further provision of interior furnishings and special historical exhibits for the Beaumont Memorial after its conveyance to the people of Michigan in dedication ceremonies on July 17, 1954; therefore be it

RESOLVED: That the House of Delegates of the Michigan State Medical Society express its deep appreciation to the Michigan Legislature for its complimentary action in adopting Senate Concurrent Resolution No. 34; and be it further

RESOLVED: That in the interest of preservation of the Beaumont Memorial and its future expansion as an historic shrine, the Michigan State Medical Society respectfully urges the Michigan Legislature to (a) continue its interest in the Beaumont Memorial, and (b) in order to better meet this purpose, to authorize an Advisory Committee of the Michigan State Medical Society to confer each year (or more often, as necessary) with the Mackinac Island State Park Commission as an advisory group on the maintenance and improvement of the Beaumont Memorial; and be it further

RESOLVED: That the Michigan State Medical Society respectfully and urgently suggests that the Michigan Legislature at its earliest convenience study and put into action a program which would encourage other professional groups, trade associations, and civic and historical organizations to adopt projects supported by voluntary financial contributions for restoring and renovating the many other historical sites in the Mackinac Island State Park as a reminder of the remarkable part Michigan has played in many fields of American scientific, cultural and political progress.

2. RESOLUTION RE PROPAGANDA ON SALK POLIO VACCINE

WHEREAS, the medical profession has accumulated a tremendous amount of practical experience in the proper methods of initiating new programs for the protection of the health of the people, and

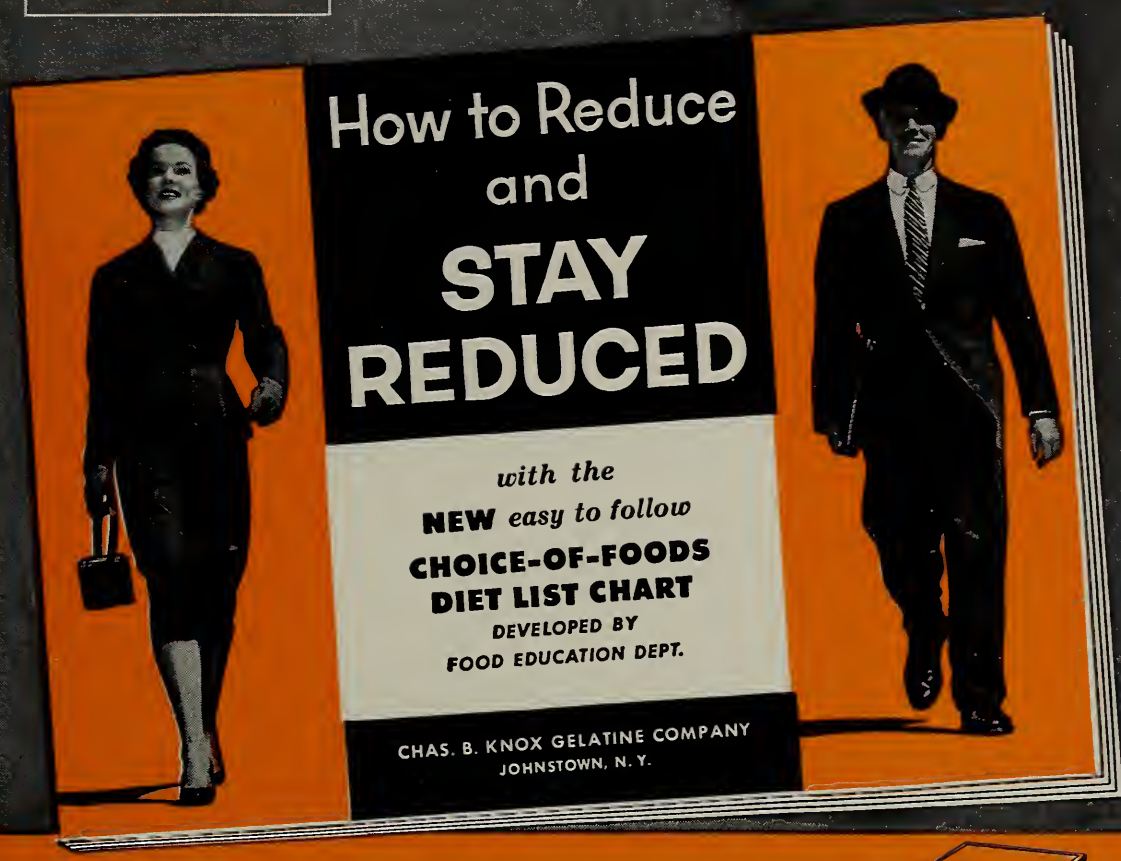
WHEREAS, this experience includes the administration of many different vaccines for the prevention of virus and other diseases, and

WHEREAS, members of the medical profession must, in the public mind, inevitably share responsibility for any confusion or tragic consequences of the improper introduction of new procedures, and

WHEREAS, the medical profession has, in the public interest, repeatedly demonstrated its desire to cooperate with its own members and with others in the implementation of such health procedures, when given time to properly review and evaluate them; now, therefore be it

(Continued on Page 514)

KNOX Protein Previews



New Booklet Available to Aid Management of Overweight Patients



The 1955 edition of the well-known Knox "Eat-and-Reduce" booklet eliminates calorie counting for your obese patients. This year's edition is based on the use of Food Exchange Lists[1] which have proved so accurate in the dietary management of diabetics. These lists have been adapted to the dietary needs of patients who must lose weight.

The first 18 pages of the new booklet present in simple terms key information on the use of Food Exchanges (referred to in the book as Choices). In the center, double gatefold pages outline color-coded diets of 1200, 1600, and 1800 calories based on the Food Exchanges. Physicians will find these diets easy to revise to meet the special needs of individual patients.

To help patients persevere in their reducing plans, the last 14 pages of the new Knox booklet are devoted to more than six dozen *tested*, low-calorie recipes. Please use the coupon below to obtain copies of the new "Eat-and-Reduce" booklet for your practice.

1. Developed by the U. S. Public Health Service assisted by committees of The American Diabetes Assn., Inc. and The American Dietetic Assn.

Chas. B. Knox Co., Inc.
Professional Service Dept. SJ-17
Johnstown, N. Y.

Please send me.....copies of the new illustrated Knox "Eat-and-Reduce" booklet based on Food Exchanges.

Heart Beats

ELECTIONS AND APPOINTMENTS

Earle A. Irvin, M.D., of Dearborn, was elected President of the Michigan Heart Association at its Seventh Annual Heart Day which was held in Detroit on Thursday, March 8, 1956 in conjunction with the Michigan Clinical Institute. Dr. Irvin, Medical Director of the Ford Motor Company, has been active in the Michigan Heart Association during the last several years, and has served as a member of the Board of Trustees since 1953. Dr. Irvin also serves on the Board of Directors of the American Heart Association and is National Chairman of the AHA Rehabilitation Committee.

Mr. George Jacoby, Detroit, Director of Personnel Relations of the General Motors Corporation, was elected Chairman of the Board of Trustees of the Association, and Secretary of Defense, Charles E. Wilson, was elected Honorary Chairman of the Board.

Other Association officers elected are:

President-Elect—M. S. Chambers, M.D., Flint
Vice President—Mr. Frank N. Isbey, Detroit
Vice President—F. D. Dodrill, M.D., Bloomfield Hills
Vice President—F. D. Johnston, M.D., Ann Arbor
Vice President—L. Fernald Foster, M.D., Bay City
Secretary—Robert E. Fisher, M.D., Battle Creek
Treasurer—Mr. Alfred T. Wilson, Detroit

The following persons were elected to the Board of Trustees for a three-year term:

Mr. Joseph A. Anderson, Flint
Paul S. Barker, M.D., Ann Arbor
M. S. Chambers, M.D., Flint
Sidney E. Chapin, M.D., Dearborn
Warren B. Cooksey, M.D., Detroit
Mr. George Dean, Lansing
Robert E. Fisher, M.D., Battle Creek
E. A. Irvin, M.D., Dearborn
Mr. Frank N. Isbey, Detroit
Ben I. Johnstone, M.D., Detroit
Mr. Alfred T. Wilson, Detroit
Mr. Paul F. Witte, Grosse Pointe
E. W. Young, M.D., Kalamazoo

Members of the Board of Trustees elected to serve on the Executive Committee are:

E. A. Irvin, M.D., Dearborn
M. S. Chambers, M.D., Flint
Sidney E. Chapin, M.D., Dearborn
Mr. J. William Hagerty, Detroit
Mr. Frank N. Isbey, Detroit
Mr. George Jacoby, Detroit
L. Paul Ralph, M.D., Grand Rapids
Donald Smith, M.D., Pontiac
Frank Van Schoick, M.D., Jackson
Mr. Alfred T. Wilson, Detroit



L. Paul Ralph, M.D. *(left)*, Immediate Past President, and M. S. Chambers, M.D. *(center)*, President-Elect, congratulate E. A. Irvin, M.D., who was elected President March 8, 1956.

Following his election, Dr. Irvin made the following Committee appointments:

Research Committee

Donald S. Smith, M.D., *Chairman*, Pontiac
Bert M. Bullington, M.D., Saginaw
Muir Clapper, M.D., Detroit
Douglas Donald, M.D., Detroit
Franklin D. Johnston, M.D., Ann Arbor
John W. Keyes, M.D., Detroit
John D. Littig, M.D., Kalamazoo

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Sidney E. Chapin, M.D., *Vice Chairman*, Dearborn
Muir Clapper, M.D., Detroit
Robert E. Fisher, M.D., Battle Creek
Scott T. Harris, M.D., Ypsilanti
Katheryn L. O'Connor, M.D., Detroit
D. Emerick Szilagyi, M.D., Detroit
Silas C. Wiersma, M.D., Muskegon
Mr. Paul Witte, Grosse Pointe

Finance Committee

Mr. Frank N. Isbey, *Chairman*, Detroit
Mr. J. William Hagerty, *Vice Chairman*, Detroit
M. S. Chambers, M.D., Flint
Mr. Cyrus King, Detroit
L. Paul Ralph, M.D., Grand Rapids
Donald S. Smith, M.D., Pontiac
Mr. Alfred T. Wilson, Detroit

By-Laws Committee

F. Janney Smith, M.D., *Chairman*, Detroit
Mr. Stanley Beattie, Detroit
Warren B. Cooksey, M.D., Detroit
Mr. George Jacoby, Detroit

Heart Day Committee

L. Paul Ralph, M.D., *Chairman*, Grand Rapids
Sidney E. Chapin, M.D., Dearborn
Muir Clapper, M.D., Detroit
Katheryn O'Connor, M.D., Detroit
Mr. Paul Witte, Grosse Pointe

Nominating Committee

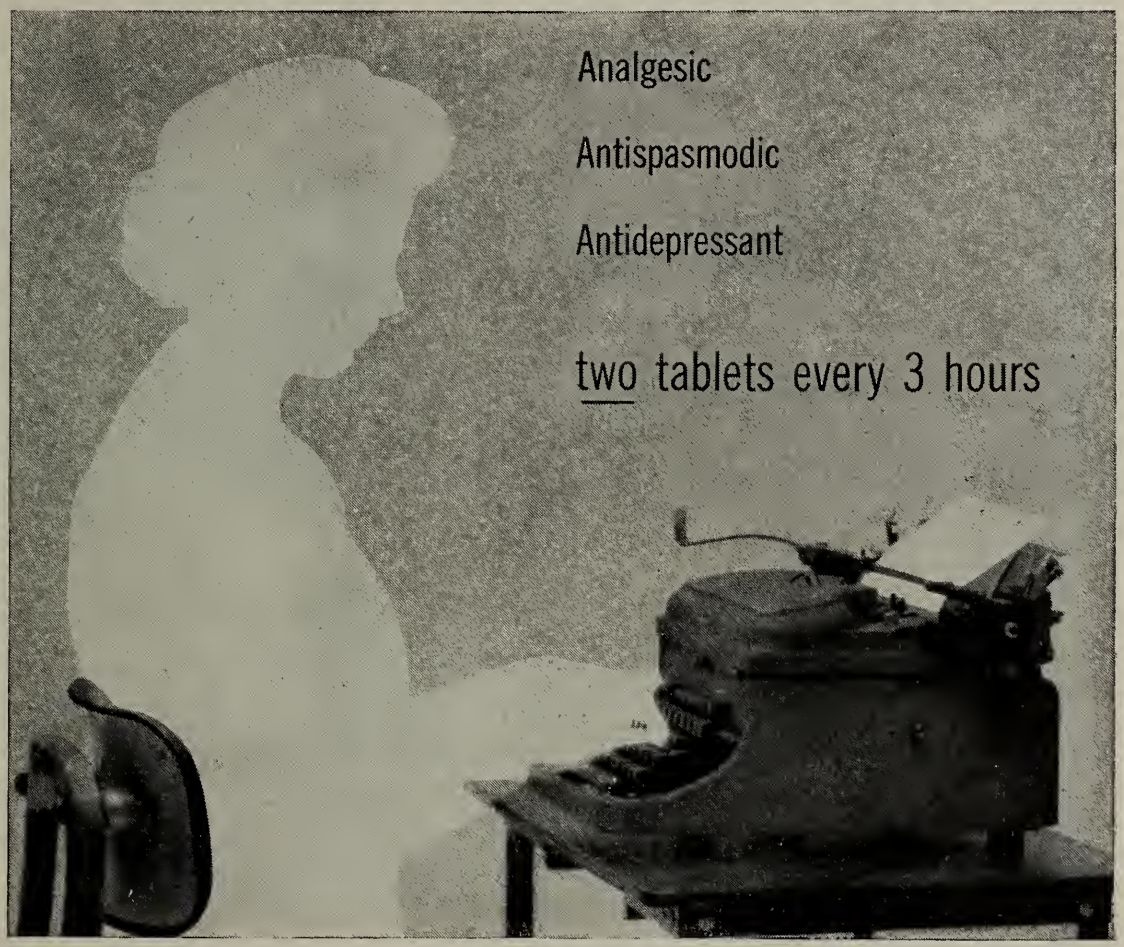
M. S. Chambers, M.D., *Chairman*, Flint
Sidney E. Chapin, M.D., Dearborn
Mr. J. William Hagerty, Detroit
L. Paul Ralph, M.D., Grand Rapids

"140 million working hours are lost annually as a result of

dysmenorrhea"[1]

Before menstruation begins, for sure relief of dysmenorrhea prescribe

Edrisal*



FORMULA: Each 'Edrisal' tablet contains:

Benzedrine* Sulfate (racemic amphetamine sulfate, S.K.F.)	2.5 mg.
Aspirin	2.5 gr.
Phenacetin	2.5 gr.

Smith, Kline & French Laboratories, Philadelphia

1. M. Times 76:416 *T.M. Reg. U.S. Pat. Off.

Doctors' Own Foundation in Twelfth Year of Progress

In eleven years of life, the Michigan Foundation for Medical and Health Education, Inc., has steadily increased its program and achieved some of its goals. Progress has been encouraging, but there is still much that could—and should—be done if the Foundation is to fulfill its mission in the future.

That, in general, is the view of Earl I. Carr, M.D., President of the Foundation, and the men around him who have directed progress of the organization.

The Michigan Foundation for Medical and Health Education was incorporated in 1945 "to acquire, provide, use, develop, endow, and finance methods, means and facilities for postgraduate education in medicine, for education in medicine, for lay health education, and for research, fellowships, and scholarships."

In the field of lay education, the Foundation has served as financial sponsor for the Annual Michigan Rural Health Conference, which is now established as one of the most worthwhile health education activities in our state. In postgraduate medical education, the Foundation has sponsored the appearance of a top-level lecturer at each recent MSMS Annual Session and Michigan Clinical Institute. At the 1956 Clinical Institute, for example, Alton Ochsner, M.D., of New Orleans, presented the Michigan Foundation for Medical and Health Education Lecture (see page 580, in this issue).

In the field of general medical education, the Foundation has loaned some $12,000 from its revolving student loan fund to promising upperclassmen who needed a financial boost in order to complete their schooling in either of Michigan's two medical schools.

It is through this student loan fund that the Foundation can perform its greatest service today. With the disappearance of "GI benefits" and the continuation of high living costs, more and more medical students feel the need for educational loans to complete their work in medicine. Borrowers are pledged to practice in Michigan.

Generous contributions by the Ingham County Medical Society and the Woman's Auxiliary to the Wayne County Medical Society have increased the loan fund within the past year, along with a number of personal contributions. However, additional individual contributions are needed to keep the student loan fund active. All contributions are deductible for income tax purposes.

Any lump sum gifts are welcomed. Of equal, or greater, importance are (1) pledges which give the donor an opportunity to spread a modest annual amount over a period of several years, or (2) the so-called "LeFevre Plan" where the individual contributes $10 or more to the Foundation annually on his birthday.

Your contribution will aid the increase of medical knowledge in Michigan and help widen medical service in our state. A Foundation pledge card is reproduced with this article as a reminder to YOU. Your contribution will be put to work at once!

Name.....

Office Address.....City.....

Residence Address.....City.....

I hereby pledge to the

MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION, INC.

606 Townsend Street, Lansing, Michigan, for the twelve-month period beginning....., the sum of

TOTAL PLEDGE	PAID HEREWITH	BALANCE DUE
$	$	$

My contribution is

Please Check Your Choice [√]

(1) In Cash ☐ — to be paid in the total sum ☐ or in annual payments of $.....

or **(2) In War of Victory Bonds** ☐ — to be paid in the total sum ☐

or **(3) In Life Insurance** ☐ — or in annual payments of $.....

or **(4) As a Memorial** ☐ — to the memory of:

.....

or **(5) In My Will** ☐

SIGNATURE.....

Reduces Muscular Tension

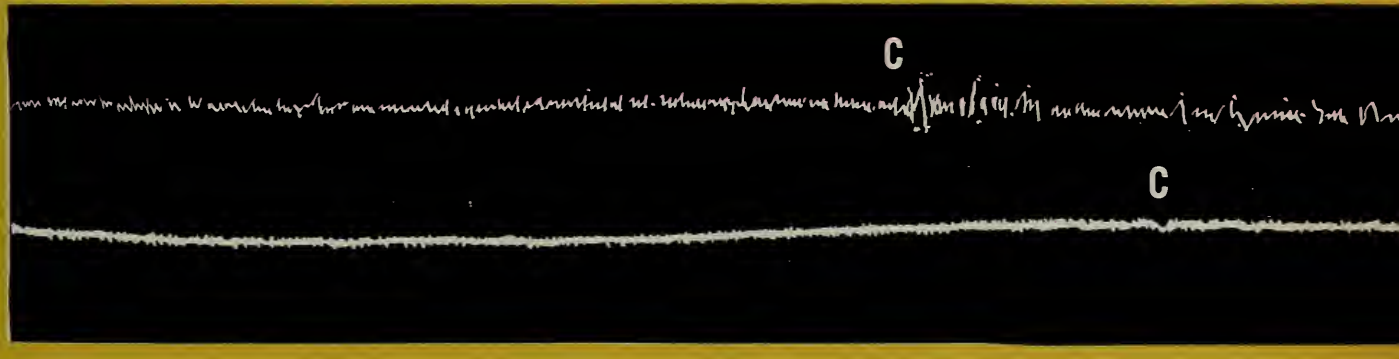
Equanil*

MEPROBAMATE

(2-methyl-2-*n*-propyl-1,3-propanediol dicarbamate)

Licensed under U.S. Patent No. 2,724,720

Electromyography shows decisive response



Electromyographic study of neuromuscular hyperactivity in 42-year-old male with anxiety-tension syndrome. A, Before EQUANIL; action potential of high amplitude and frequency. B, After one week of ambulatory treatment with EQUANIL; showing definite reduction in tension, greater ability to relax, and marked improvement in muscular coordination. C, Point where patient makes effort to relax.[1]

The remarkable effectiveness of EQUANIL may be demonstrated in two ways. One is by its ability to relieve muscle spasm and neuromuscular tension.[1] The second is by its ability to relieve mental tension and anxiety.

Usual dosage: 1 tablet t.i.d. The dose may be adjusted either up or down, according to the clinical response of the patient.

Supplied: Tablets, 400 mg., bottles of 50.

1. Dickel, H.A., et al.: West. J. Surg., April, 1956.

anti-anxiety factor with muscle-relaxing action . . . relieves tension

Wyeth®

Philadelphia 1, Pa.

*Trademark

Michigan Licentiates in Medicine

The Michigan State Board of Registration in Medicine announces the following licenses issued by examination or certification from May 9, 1955, and including January 25, 1956, beginning with number 21121 and ending with number 21584.

Austin, Shirley Univ. of Penn. '47
Cook, John Lee U. of Michigan '53
Himel, Sanford Zygmunt Univ. of Basel '39
Carlson, Ralph Gilbert Univ. of Illinois '53
Noe, Joseph Thomas Univ. of Louisville '37
Jordan, Alexander Dillon Hahnemann Med. Col. '33
Hettle, Paul M. Ind. Univ. '51
Ditzler, John Wm. Temple Univ. '44
Petersen, Geo. John Univ. of Wis. '52
Brooks, Roosevelt Univ. of Ill. '29
Haanes, Mary Lou Turner Univ. of Penn. '48
Tkachuk, Demytro Univ. of Poznan '30
Pollens, Louis Samuel Ohio St. Univ. '53
Feller, Irving U. of Michigan '53
Ladd, James Evans Temple Univ. '51
Jordan, Robt. Henry Univ. of Virginia '53
Schmidt, Harry J. Univ. of Mich. '48
Kalichman, Nathan McGill Med. Coll. '44
Richard, Robert Earl Med. College of Virginia '48
Haberstroh, Colleen Ellen Univ. of Iowa '51
Basinger, Clair Eugene Univ. of Chicago '46
Hutto, Wm. Harry Indiana Univ. '37
Hickner, Lawrence P. Creighton Univ. '47
Jankoska, Richard Lyle Louisiana St. Univ. '50
Mitcham, Leroy Meharry Med. College '52
Valantiejus, John A. Stritch Med. School '51
Jenkins, Sidney Bernard Howard Med. School '51
Murray, Raymond Harold Harvard Med. School, '48
Geneczko, John Theodore Jefferson Med. Coll. '51
Olson, Robt. Charles Marquette Sch. of Med. '53
Valdmanis, Ferdinands Univ. of Latvia '42
Hollinger, Harry Howard U. of Michigan '54
Page, Merle Charles U. of Michigan, '51
Wersich, Wilbern Wm. Northwestern Sch. of Med. '51
Landry, Roy Anthony Louisiana State Med. Sch. '51
Harvey, John George Klemm U. of Penn. '45
Cole, Versa Viola U. of Chicago '38
Rogers, Charles S. U. of Penn. '47
Chen, Hsi-Sheng Yue
Women's Christian Medical College '35
Peake, Charles Orlando, III U. of Penn. '51
Barger, Andrew J. Jefferson Med. College '51
Albert, Donald George Temple University '51
Farnam, Larry M., Jr. Oklahoma Univ. '39
Daly, Miriam Shamer Univ. of Maryland '50
Daly, Harold Lawrence, Jr. Univ. of Maryland '50
Armstrong, Wayne Edward U. of Michigan '54
MacPhail, Albert Angus U. of Michigan '54
Webb, Walter Leo U. of Michigan '54
Nakfoor, Eugene Carl U. of Michigan '54
Zick, Gerald Adolph U. of Michigan '54
Davis, William Benedict U. of Michigan '54
Allaire, Francis John U. of Michigan '54
Anderson, Beverly Lytle Wayne Univ. '54
Appell, Lloyd Edward U. of Michigan '54
Audretsch, Frank E. Wayne Univ. '54
LeMieux, Leslie L., Jr. Western Reserve '54
Best, John Alden Hahneman Med. College '54
Dykewicz, Richard Alfred Wayne Univ. '54
Moeller, Jan Christen U. of Michigan '54
Thompson, Chas. Andrew U. of Michigan '54
Jarkowski, Thadeus Lloyd Wayne Univ. '54
Manahan, Raymond James Wayne Univ. '54
Montgomery, Wm. Chalmers Johns Hopkins '5[illegible]
McPhee, Edward Charles Wayne Univ. '54
Lowry, Robt. Andrew U. of Michigan '54
Batsakis, John George U. of Michigan '54
Jackson, Donald Pearce U. of Michigan '54
Wenzler, Paul Jordan Indiana Med. School '54
Beljan, John Richard U. of Michigan '54
Boman, Robt. Henning Wayne Univ. '54
Court, Jack Louis U. of Michigan '54
Crawford, John Winfred U. of Michigan '54
DeVries, John Martin U. of Michigan '54
Myers, Thomas Warren U. of Michigan '54
Hepworth, Claud Ira U. of Michigan '54
Basel, Arthur Richard U. of Michigan '54
DeWitt, Donald Everett Wayne Univ. '54
Fish, James Bartlett U. of Michigan '54
Issett, Armand L., Jr. Wayne Univ. '54
Kemp, Wallace Rudolph U. of Michigan '54
Kutcipal, Richard Andrew U. of Michigan '54
Lowrie, James Harry Wayne Univ. '54
Licht, Robert U. of Michigan '54
Mason, Warren Burt U. of Michigan '54
McCabe, Brian Francis U. of Michigan '54
Miller, Theodore Phillip Wayne Univ. '54
Peltz, Morris Leo U. of Michigan '54
Poppy, James Henry U. of Michigan '54
Postman, Howard Fanual U. of Michigan '54
Reus, Wm. Fredrick U. of Michigan '54
Rosenbaum, Jean B. Wayne Univ. '54
Selving, Benjamin T. U. of Michigan '54
Sheldon, Edward Alvan U. of Michigan '54
Johnson, Frank Donald U. of Michigan '54
Sisson, James Chas. U. of Michigan '54
Spencer, Clyde J. U. of Michigan '54
Stewart, Bruce Hubbard U. of Michigan '54
Weston, Arthur Sherwin U. of Michigan '54
Kamsler, Milton A., Jr. U. of Penn. '47
Allis, Lyle M. U. of Michigan '54
Ausum, John David U. of Michigan '54
Balow, Ross Marvin Wayne Univ. '54
Benedict, James Stephen U. of Michigan '54
Bennett, William Bruce U. of Michigan '54
Berry, Ivor, Jr. U. of Michigan '54
Boerman, Walter John U. of Michigan '54
Bologna, James Joseph U. of Michigan '54
Borchak, Robt. Geo. Wayne Univ. '54
Eary, L. Edmond, Jr. U. of Michigan '54
Busteed, Wm. Savage U. of Michigan '54
Danz, Geo. William U. of Michigan '54
France, Lloyd Carol U. of Michigan '54
Finger, John Edward U. of Michigan '54
Heinemann, Herman Judd U. of Michigan '54
Heyner, Conrod Stanley U. of Michigan '54
Hicks, Wm. Kenneth U. of Michigan '54
Hunter, Harry Holmes U. of Michigan '54
Ragins, Abner I. Wayne Univ. '54
Rosenbaum, Louis II U. of Michigan '54
Bunto, William G. U. of Michigan '54
Tinkey, L. Leo State U. of Iowa '53
Jenkins, Henry Leonard Howard Univ. '54
Scott, Benjamin F. III Univ. of Ark. '45
Jones, Robert Collier U. of Michigan '54
Joseph, Robert Henry U. of Michigan '54
Kempers, Roger Dyke Wayne Univ. '54
Mau, Allen Kim Wo U. of Michigan '54
McAlindon, James Daniel Stritch Sch. of Med. '54
Nicholson, Hiram A. Wayne Univ. '54
Riddle, Chas. Baxter Wayne Univ. '54
Sargent, Chas. Alden U. of Michigan '54
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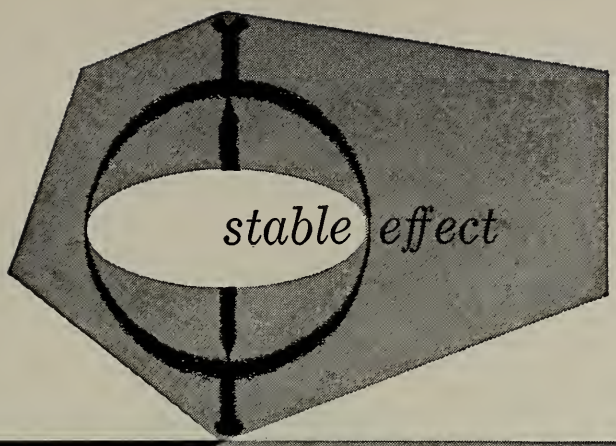
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Wagstaff, Mary Jane Keith Northwestern Univ. '54
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Murray, Roger C. U. of Minnesota '52
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Glowacki, Edward T. Wayne Univ. '54
Gikas, Paul Wm. U. of Michigan '54
Gass, Michael Arthur Wayne Univ. '54
Foss, David Edgar U. of Michigan '54
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Reiner, Harold Donovan.....
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Hildebrandt, H. Mark U. of Michigan '52
Heath, David DeVol Temple Univ. '51
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Wertz, Wayne LeRoy Northwestern Univ. '53
Proud, Russell Fawcett U. of Toronto '53
Mertz, Joanne Elizabeth Duke Univ. '51
Blysma, Glenn Wm.....College of Med. Evangelists '54
Robins, John Calvin Wayne Univ. '54
Papadopulos, Valentina Univ. of Low '49
Holm, Leo Hart Col. of Med. Evangelists '54
Petrick, Thomas Joseph Columbia Univ. '48
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Knopf, Ralph Fred U. of Michigan '54
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Riley, Joseph L. Col. of Med. Evangelists '54
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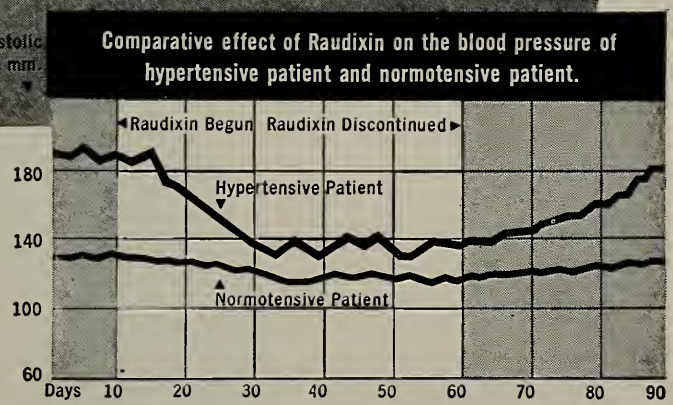
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Shek, John Leonard
National Med. Coll. of Shanghi '47
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Bloom, Robt. Edwin U. of Chicago '51
Coates, E. Osborne, Jr.....U. of Penn. '44
Miller, Jacob James St. Louis Univ. '51
James, Robt. Edward U. of Colorado '54
Hanan, Robt. Tulane Med. School '47
Verkaik, Peter John U. of Michigan '54
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Olson, Walter Richard Coll. of Medical Evangelists '54
Dickman, Fred Carleton U. of S. Dakota '49
Melander, Leonard W. Jr. U. of Minnesota '47
Gram, Peter Basil U. of Rochester '52
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Johnson, Edwin August U. of Texas '54
Hopkins, Andrew Jackson Wayne Univ. '54
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Thompson, John Morgan Johns Hopkins U. '48
Dolan, Edward A. Creighton U. '43
Unkefer, LeMoyne I. Ohio State U. '54
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Weber, Robt. Donald
Stritch School of Med. of Loyola U. '52
Bryan, Geo. Cochrane Columbia Univ. '53
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London, Berton Lee U. of Michigan '54
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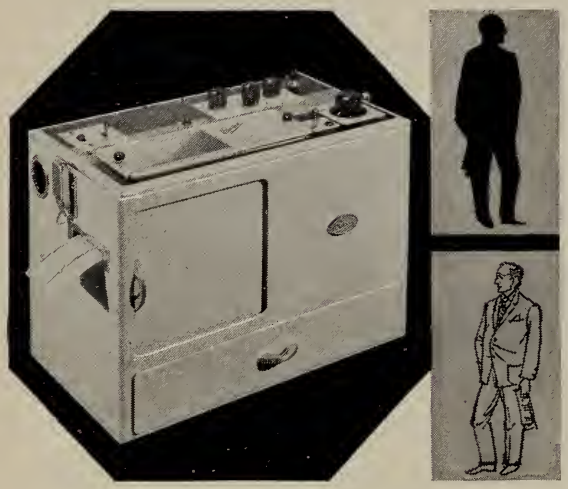
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1. Spies, T. D., et al.: GP 12:73, No. 1, 1955. 2. Boland, E. W.: J.A.M.A. 160:613, 1956. 3. Gillhespy, R. O. Lancet 2:1393, 1955.

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Editorial Opinion

THE DISLOYAL MINORITIES

When a few doctors obstruct a plan to provide medical care insurance for civil employes of our state, and for Federal employes resident in New York State, . . . after a conclusive majority of the doctors of the state have endorsed the plan through their designated spokesmen . . . can this mean disloyalty?

Minorities serve a useful function . . . when they are ruled by selfish leaders they go wrong. It takes an aggressive minority to prod a stuffed-shirt complacent majority into needed progressive changes. When the votes are counted a loyal minority joins the majority to make the action unanimous.

Among all people . . . whether tradesmen, artisans or professionals . . . there are small numbers motivated solely by selfishness . . . which trait is usually masked . . . at least this is true among members of our medical profession. But, sooner or later, the ugly truth becomes obvious.

Among these dissident selfish characters are those who say "no one can tell me what I can charge for my services" or, "no one can fix my fees." Back of such slogan-shibboleths is carried on a masked banditry . . . the poor and the rich alike are the victims. While this sort of practice remains a solo performance, we can only "let the buyer beware."

For more than fifteen years a majority of doctors have agreed that something should be done about the rising costs of medical care. In New York, as in most other commonwealths, laws have been enacted to license "voluntary non-profit medical care insurance" plans. Through such agency it is possible for people having limited or moderate resources to pay for such medical care as may become necessary. The first experiences were developed "on a local level." The success of this plan of insurance is now assured . . . it has matured and no longer can it be called an experiment.

Today comes a new problem. In New York, each voluntary non-profit plan is limited to operations within eighteen counties.

The civil employes of the entire state are seeking the benefits of this new social plan for hospital and doctor-care insurance . . . with their dependents they count up to some 125,000 persons. There are other large groups.

The Federal employes . . . never too well paid . . . are also asking for this newer type of insurance to pay hospital and doctor-care bills. The number domiciled in New York State is estimated to be 200,000 . . . increased by their dependents to 500,000 persons.

There are other large groups . . . employes of concerns doing a multi-state business . . . railways and other carriers, mine workers and fuel suppliers, and many others. All these large groups want similar coverage regardless of the domicile locations.

The doctors of our State through the Blue Shield Plans of New York are willing to provide coverage for residents of our State who are employed in such groups . . . but . . . minorities of two areas . . . disloyal to the creed of our profession . . . refuse to abide by the terms of contracts which assure paid-in-full care for patients who are in the lower income levels . . . to terms of coverage accepted by physicians in all other parts of the State.

In one area this disloyalty goes to the point of organizing to take over the local Blue Shield . . . to repudiate the philosophy of the majority of our State. Can the damage they do be repaired?

A conflict within the profession will do for us what a divided profession did for doctors in many foreign lands. It gives the politicans opportunity to take-over and exploit doctor-care as a political bonus to their followers.

IS THIS WHAT DOCTORS OF THESE TWO AREAS WANT?—The Bulletin of the Medical Society of the County of Kings, February, 1956.

RESOLUTIONS

(Continued from Page 500)

RESOLVED: That this Society respectfully urge all legislative bodies, lay, private, and official public health agencies, to avail themselves of their opportunity to consult with the proper committees of this Medical Society and other medical societies concerned, before new health procedures are introduced; and that these private and public health agencies provide such medical societies with all scientific data available in time for its careful evaluation before programs are started; and that such legislative bodies, lay, private, and official public health agencies recognize the rich experience of this and other medical societies when their advice is given for the planning of new health programs.

3. RESOLUTION RE POLLUTION OF INLAND WATERWAYS

WHEREAS, the State Department of Conservation has improved recreational facilities by purchase of waterfront land and has opened inland waterways and lakes, making these waterways accessible to our citizens, including owners of large boats, and

WHEREAS, pollution and desecration of Michigan inland waterways and lakes may therefore occur by unsanitary disposal of human and other wastes; therefore be it

RESOLVED: That the Michigan State Medical Society urge the Department of Conservation to investigate this situation and take proper steps to eliminate any problem which may be disclosed.

PR REPORT

RECENT EVENTS emphasize the need for better public understanding of the Blue Shield Plan, its relationship to Blue Cross, and the relationship of the medical profession to each of these non-profit plans. Within the space of a few weeks a number of letters and articles appearing in Michigan newspapers indicated that the misunderstanding was much more acute than had been generally recognized, even though MSMS has been concerned with the problem almost from the inception of Blue Shield.

Other indications were found in the discussions leading up to the establishment of the current Governor's Study Commission on Prepaid Hospital Care Plans and, in fact, in the hearings before that Commission once its investigation began.

Since so much of the misunderstanding seemed directly concerned with the medical profession and the role of the individual doctor of medicine in prepaid medical and surgical service, rather than in the principle of prepayment for low-income groups, MSMS elected to take positive action in behalf of its members. After study, the Executive Committee of The Council determined that display advertisements in selected daily newspapers provided the best medium for reaching the greatest number of people.

An ad was drawn up with Executive Committee approval, and scheduled for Sunday newspapers April 22. The headline: "What is the difference between Blue Shield and Blue Cross?" Other advertisements may follow at intervals, explaining other facets of the M.D.'s part in Blue Shield service, as part of an intensified educational program to broaden understanding.

Use of newspaper advertising to correct misunderstandings which were being compounded by repetition was a decisive new step in MSMS public relations policy. MSMS acted quickly, but not hastily, in taking the step.

MEDICAL EDUCATION WEEK, the first such nationwide observance, tied in well with the MSMS PR program and was bound to attract wide attention in Michigan with strong promotion. Although the full-scale review of the week's success will have to appear in a later JOURNAL, MSMS and several county medical societies (notably Wayne and Saginaw, from the preliminary reports) sponsored or co-operated in a number of activities calling attention to the progress and importance of medical education in Michigan. A proclamation by the Governor, at the suggestion of MSMS, several special television and radio shows, a series of statewide news releases, a number of service club talks, and an open house at Wayne University Medical School were among the major items in Michigan participation.

The MSMS newspaper advertisement on April 22, mentioned earlier, called attention to Medical Education Week and served as a keynote for the event which continued through April 28.

When the nationwide impact is tabulated, Michigan is certain to be among the leaders in effectively drawing attention to the achievements and problems in medical education, particularly to those related to the medical schools at University of Michigan and Wayne University.

THE MICHIGAN LEGISLATURE merits praise for its progressive viewpoint in health and medical affairs throughout the 1956 session. Although final decision on details of two important issues hang fire as this is written, many positive steps have been taken to protect the quality of medical care provided Michigan people. In addition, the groundwork has been laid for even greater progress in the future if the Legislature maintains the attitude evidenced this year.

This being an important election year, now is the time for every MSMS member—as an individual—to review the record of his own representatives in the State Legislature in health and medical matters. Legislators are sincere in their desire to serve the people they represent, so a word of encouragement supporting his efforts to return to Lansing is very much in order if you feel the members of the Legislature from your district have done a creditable job. The best time to become acquainted with candidates from your district, and to share your views with them, is before Election Day.

PR BRIEFS: The Woman's Auxiliary to the Ingham County Medical Society again performed a fine service for the whole Michigan medical profession with a well-planned reception honoring the wives of legislators and state officials mid-way through the 1956 legislative session. . . . MSMS Public Relations field secretaries will step up their contacts with county medical societies and are available to help out in local situations whenever needed, now that the Legislature has adjourned. . . . President William S. Jones, M.D., of Menominee, and his presentation on MSMS services are in great demand by county medical societies throughout the state. There still may be some open dates on his crowded schedule for a few societies that have not yet issued an invitation.



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of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

VOLUME 55 MAY, 1956 NUMBER 5

Chemotherapy of Rheumatic Fever

By Norman E. Clarke, M.D.,
Charles N. Clarke, M.D., and
Robert E. Mosher, Ph.D.

Detroit, Michigan

IT was almost eighty years ago when the salicylates were introduced for the treatment of rheumatic fever. Since that time numerous other types of compounds have been used for the treatment of this disease but without success. The recently discovered adrenocorticoids are the only other compounds known to suppress the manifestations of rheumatic fever. However, the therapeutic value of the salicylates in rheumatic fever has been found equal if not superior to that of cortisone and ACTH.

It was our purpose to find an anti-rheumatic drug that would have greater therapeutic potency and less toxicity than has salicyclic acid. The anti-rheumatic action of salicylic acid is established, so we have investigated compounds that are related to it chemically.

The chemical structure of salicylic acid is a six sided benzene ring with a (COOH) or carboxyl group and a single (OH) or hydroxyl group adjacent to it or in the ortho position. Salicylic acid has two isomers, one with the (OH) group in the 3 or meta position, and in the other it occupies the 4 or para position on the benzene ring. Of these three compounds only salicyclic acid will suppress the manifestations of rheumatic fever. It is notable that the (OH) or hydroxyl group occupies the ortho position in the active compound which makes it possible to form an additional or chelate ring. This is accomplished by the (OH) or hydroxyl group sharing its hydrogen ion with the ketone of the adjacent carboxyl group. It is the forming of a chelate ring that endows salicyclic acid with its unique ability to suppress the manifestations of rheumatic fever. However, when salicyclic acid is used in the dosage required to accomplish a therapeutic result, it is poorly tolerated. Its toxic reactions of tinnitus, sweating, gastrointestinal disorders, and particularly acidosis limit the usefulness of this drug.

An important metabolite of salicylic acid is the 2-5, Di-hydroxy benzoic or gentisic acid. This compound has the chemical structure of salicylic acid plus a second (OH) or hydroxyl group in the 5 or para position. This type of chemical structure permits the formation of a chelate ring and also a reversible quinone-hydroquinone system. We have treated with gentisic acid more than one hundred patients who had the monocylic, polycyclic, or persistently active form of rheumatic fever. When gentisic acid was administered in doses equal to those required for salicyclic acid, it excelled the salicylates in several respects. When the gentisates are administered in either the powdered or liquid form they cause no toxic reaction. The salicylates do not control the manifestations of the persistently active form of rheumatic fever, but this form is controlled by the gentisates. We have administered the drug for as long as three years without noting any loss of potency. The gentisates are therapeutically effective in a

Presented at the Fifth Annual Heart Day as part of the Michigan Clinical Conference on March 11, 1955.
From the Department of Research, Providence Hospital, Detroit, Michigan. This work has been supported by grants from the Michigan Heart Association.

broader spectrum of this disease and likewise cause no toxicity. This decreased toxicity seems to follow the addition and position of the second (OH) or hydroxyl group on the benzene ring.

The fact that gentisic acid produced no toxic reactions when used in therapeutic doses, and had a broader therapeutic effectiveness in suppressing the manifestations of rheumatic fever, could be due to the addition of the reversible quinone-hydroquinone system to the otherwise chemical structure of salicylic acid. It appeared probable that unknown therapeutic effects would be accomplished by the different positions of the second or third hydroxyl group on the benzene ring when added to the primary structure of salicylic acid.

To evaluate the pharmacological significance attaching to the location of additional hydroxyl groups to the primary salicylic acid structure and especially of the quinone-hydroquinone system, we have examined various isomers of gentisic acid. Thirty patients who had rheumatic fever have been treated with beta resorcylic acid. This compound is an isomer of gentisic acid with the second (OH) or hydroxyl group added to the primary chemical structure of salicylic acid in the 4 position. This permits the formation of a chelate ring, but unlike gentisic acid, it cannot form a quinone-hydroquinone system. These patients received 1 to 2 gm. of beta resorcylic acid in divided doses daily for periods of two weeks to three months. We found that beta resorcylic acid suppressed the manifestations of rheumatic fever but less effectively than did gentisic acid, its analgesic and temperature reducing properties being greater than its influence on the manifestations of carditis. Diarrhea occurred in 20 per cent of the thirty patients treated with beta resorcylic acid. The addition of a second hydroxyl group in either the 4 or 5 positions of the primary chemical structure of salicylic acid greatly reduced their toxicity. The shifting of the hydroxyl group from the 5 to 4 position on the benzene ring produced the specific toxic reaction of diarrhea.

Another isomer of gentisic acid is 3-4, Di-hydroxy carboxylic or protocatechuic acid. This compound can form a quinone but not a chelate ring. It was administered to three patients who had rheumatic fever, and for periods of from seven to ten days. These patients received 1 gm. of the compound at three-hour intervals, or a total of 6 gm. in each twenty-four hours. Protocatechuic acid causes further elevation of the patients' temperature and heart rate and increased their rheumatic pains and general discomfort. There was an increase in the already elevated blood sedimentation rates and all patients became sleepy, physically and mentally less active, appeared depressed and complained of headache.

Another isomer of gentisic acid is gamma resorcylic acid. In this compound the (OH) or hydroxyl groups occupy the 2 and 6 positions on the benzene ring. The hydroxyl group in the ortho position in salicylic acid permits the formation of a chelate ring, so it was thought possible to enhance this action by having the second (OH) or hydroxyl group in the 6 position. Such a compound could form a double chelate ring. This compound has been given to six patients who had rheumatic fever. The compound was given in 0.2 gm. doses, and a total of 1 or 2 gm. was given in each twenty-four-hour period. They were treated for from one to six weeks. This compound suppressed the manifestations of rheumatic fever with much smaller doses than are required with the salicylates. The average dose required was about one-tenth of the usual therapeutic dose for the salicylates. The promptness of relief in these patients was remarkable, as within a few hours they would be relieved of their rheumatic pains or the painful symptoms of pericarditis.

The pharmacologic significance of an additional or third hydroxyl group and its location in the double chelate ring compound was determined by administering to twelve patients who had rheumatic fever the compound 2-4-6, Tri-hydroxy carboxylic or phloroglucinol carboxylic acid. This compound has the chemical structure of a double salicyclic acid like gamma resorcylic acid but with a third hydroxyl group in the 4 position on the benzene ring. The compound was administered in 0.3 gm. capsules, and 1 gm. to 6 gm. was given each day for periods of from seven days to three months. Most of our patients received 1 to 1.3 gm. of the compound in divided doses in each twenty-four-hour period and for from ten to twelve weeks. The manifestations of rheumatic fever were suppressed in two to three days, temperatures became normal in from six to ten days, and the blood sedimentation rates in most patients were normal within the fourth week of therapy, with some becoming normal within seven to fourteen days.

We were impressed by the prompt manner in which rheumatic fever manifestations were suppressed by phloroglucinol carboxylic acid therapy. There were no toxic reactions. With patients in whom this was started shortly after the onset of their disease, there seemed to be an unusual restoration of normal heart findings. It was our impression from this limited series of patients that phloroglucinol carboxylic acid might prevent permanent heart damage if it was used early in the disease. Phloroglucinol carboxylic acid has an anti-rheumatic potency that is eight to ten times greater than either salicylic or gentisic acids.

The unique ability of salicylic acid to suppress the manifestations of rheumatic fever has made its use in this disease paramount in spite of its undesirable side reactions. It required four weeks or longer for salicylic acid to suppress the manifestations of rheumatic fever, and its toxic reactions may be more distressing than the disease.

The discovery that gentistic acid was a metabolite of salicylic acid prompted its use in this disease. The gentisates suppress the manifestations of rheumatic fever in one to three weeks, and do so without producing any toxic reaction. However, their effective therapeutic dose is the same as for the salicylates. Gentisic acid has one distinct advantage in that unlike salicylic acid it is therapeutically effective in the chronic persistently active form of rheumatic fever.

The compound beta resorcylic acid is not as therapeutically effective as the gentisates. The fact that beta resorcylic acid is effective emphasizes the importance of the ortho position and also of the position of the second hydroxyl or (OH) group on the benzene ring. The position of the second hydroxyl group in beta resorcylic acid is such that a quinone-hydroquinone system cannot be formed as with gentisic acid. The quinone-hydroquinone system and the ortho position may be equally important or complement each other in suppressing the manifestations of rheumatic fever.

The importance of protocatechuic acid was its inability to form a chelate ring while being able to form a quinone-hydroquinone system. Protocatechuic acid is a catechol and related to adrenalin. We found this compound distinctly toxic and without influence on the manifestations of rheumatic fever.

The fact that gamma resorcylic acid can form a double chelate ring accounted for its ability to suppress the manifestations of rheumatic fever in but a few days, and to do so in doses that were about one tenth that required with salicylic acid. We observed a tendency for recurrence of rheumatic fever manifestations after seven to ten days of treatment with gamma resorcylic acid. This recurrence of symptoms never required the use of other forms of therapy and subsided with the continued use of the compound.

Of the compounds investigated by us so far, the most promising has been phloroglucinol carboxylic acid. This compound has the high potency of gamma resorcylic acid, the ability to suppress the manifestations of the disease in a few days, the important quality of being nontoxic and the possibility that, when used early in the disease, it may minimize heart damage.

We believe that we have been able to improve the treatment of rheumatic fever by discovering compounds that are low or lacking in toxicity but which contain a high degree of therapeutic effectiveness in doses that are much smaller than those required with salicylic acid. We have had reason to believe that a drug may be found that, when used early in the disease, will prevent or minimize heart damage. This is a preliminary report of work that is continuing toward the goal of improving antirheumatic therapy with a drug that is non-toxic, effective in small doses, and able to prevent heart damage.

FIFTY MILLION IN BLUE CROSS

More than 50,000,000 persons are now enrolled in the eighty-six Blue Cross plans in the United States, Canada and Puerto Rico, making it the largest voluntary organization in the nation, according to William S. McNary, executive vice president of Michigan Blue Cross. Blue Cross membership reached 50,179,264 in September, 1955. Although the Blue Cross principle of prepaid hospital care has existed only a little over twenty-five years, Blue Cross Plans now cover nearly one out of every three persons in the country. Michigan Blue Cross was established in March, 1939, and now covers half the population of the state. Its present enrollment exceeds 3,600,000. During 1955, Michigan Blue Cross paid hospitals for a record $88,000,000 worth of hospital care for 500,000 Blue Cross members who needed it.

Arterial Replacement with Nylon Prostheses

By Rudolph J. Castellani, M.D.,
Lyle F. Jacobson, M.D. and
Prescott Jordan, Jr., M.D.
Detroit, Michigan

DESPITE the vast amount of research in recent years, the ideal substitute for the aorta and major arteries has not been found. In the past arterial substitutes have ranged from so-called viable materials, including autogenous veins and homogenous arteries, to a multitude of non-viable materials, including metals, plastics, glass and various types of cloth.

The use of veins to replace segments of aorta is generally unsatisfactory because autogenous vessels of sufficient length and diameter are not available. Moreover, it has been demonstrated that a high percentage of such grafts undergo aneurysmal dilatation.[1] Aortic homografts, on the other hand, have been used successfully by a number of investigators.[2] Our use of irradiated homografts and freeze-dry methods of storage has been successful; however, the aggregate difficulties of acquisition, storage and sterilization have been discouraging. Although Szilagyi[3] has recently reported an improved method of sterilizing grafts using beta-proprio-lactone, in our own laboratories the chemical sterilization of homografts has been a tedious and unpredictable technique. In addition to the above problems, degenerative changes, notably calcification,[4,5] appear to be accelerated in homografts, a fact which we feel might well limit their usefulness.

Continued difficulties, therefore, have directed our most recent endeavors to the use of non-viable materials, for the criteria of the satisfactory prosthesis as noted below can be fulfilled by such a material. We feel that the ideal aortic substitute must be readily available, economical, easily stored, and readily sterilized. Moreover, it should be durable and non-reactive and should foster arteriogenesis by the patient.

As previously stated, many materials have been used. Although most of these have proved to be unsatisfactory, certain ones appear to show promise. Blakemore and co-workers,[6] in 1952, introduced grafts made of Vinyon-N cloth into the aortas of dogs and demonstrated continued patency in a high percentage of cases. By histologic study, they showed that these grafts became incorporated into a new fibrous tube with the ultimate development of an endothelial lining. Shumacker[7] has recently reported similar gross and histologic findings using nylon grafts and grafts constructed from nylon and polyethylene. Finally, similar results have been reported by Hufnagel,[8] using orlon.

During this period we have been conducting our own studies in this field. Keeping the above criteria in mind, we selected first nylon and then, for reasons apparent later, nylon and polyethylene for pilot studies.

Method

Fine mesh nylon containing a standard number of strands per square inch was used in all cases. Initially, tubes were made simply by folding a piece of nylon on itself and sewing it into a cylindrical structure by means of a continuous horizontal mattress suture. Thus, fine mesh nylon tubes with a single longitudinal suture line were created (Fig. 1). Such grafts could be satisfactorily manipulated and appeared to function well, but loss of blood through the nylon mesh was excessive. This made it necessary to incorporate a less porous material between two layers of the same nylon to form a cloth-like material more impervious to blood. This material was made by placing a layer of thin polyethylene between two layers of nylon and thermally fusing the three layers together. A pressing iron was used and the desired temperature was discovered by trial and error. The resultant material was somewhat less pliable than nylon alone but was as easily sutured and manipulated. In addition,

Aided by a grant from the Michigan Heart Association and the Research Corporation of the Detroit Receiving Hospital.

From the Department of Surgery, Wayne University College of Medicine, Detroit Receiving Hospital, and the Dearborn Veterans Administration Hospital.

it had the advantage of obviating significant transmural blood loss.

A total of twenty dogs were used for experimental purposes. Nylon-polyethylene grafts were



Fig. 1. Components of nylon-polyethylene graft and finished product.

introduced into seven thoracic aortas, eight abdominal aortas, and five femoral arteries. All grafts were sterilized by the simple expediency of autoclaving, and this produced no adverse effect upon the integrity of the tubes. The vessels receiving the grafts were simply mobilized, transected, and allowed to retract, though in some instances a small portion was resected to accommodate longer nylon segments. The vessels involved were occluded for periods ranging between seventeen and forty-five minutes and the grafts were sutured into place by means of interrupted everting sutures of No. 4-0 or No. 5-0 arterial silk. All animals were given penicillin in the postoperative period, but postoperative care was otherwise routine. Three dogs died of pneumonia, and the remainder were followed for various periods of time. A number were sacrificed for the purpose of gross and histologic study, and the remainder underwent angiography for evaluation of the patency of the grafts (Fig. 2).



Fig. 2. Angiogram showing nylon-polyethylene graft after sixteen weeks.

Results

By reference to Table I, it is noted that all thoracic grafts were patent at intervals ranging between one week and twenty-four weeks. Seven of eight abdominal grafts were found to be patent after a period of from two days to ten weeks.

TABLE I

Vessel	Number of Cases	Period	Patency
Thoracic aorta	7	24 weeks	7 (100%)
Abdominal aorta	8	10 weeks	7 (87%)
Femoral artery	5	12 weeks	2 (40%)

Only two of five femoral grafts were open after five to twelve weeks of observation. It is noteworthy that in the only instance of thrombosis of an abdominal graft, the dog was the smallest used, the aorta having a diameter of only 6 mm. This may or may not have been contributory, but since the peripheral tubes were clotted in 60 per cent of the cases, there is likelihood that the calibre of the vessel is an important consideration.

The gross and histologic appearance of the grafted segments tended to corroborate the observations of Shumacker reported in 1955, and were comparable to changes previously described by Voorhees, Jaretzki and Blakemore in 1952.[6] The specimens removed* as early as two and

*We wish to thank the Pathology Department of Wayne University Medical College for the gross and microscopic interpretation of specimens.

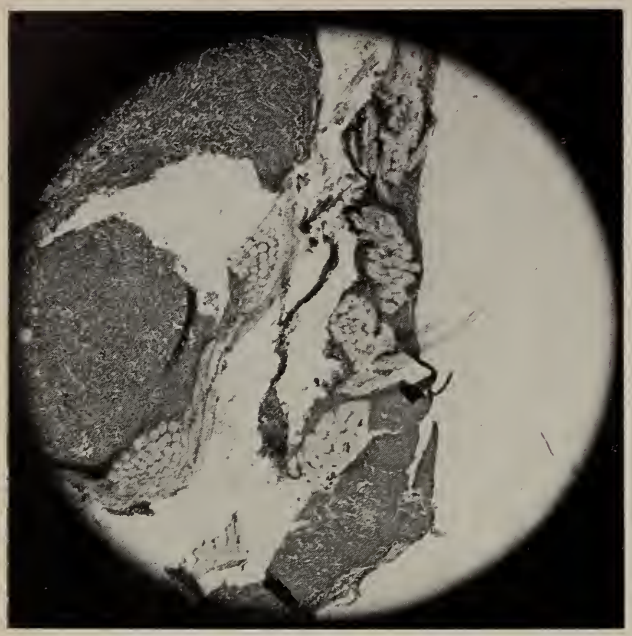


Fig. 3. Microscopic view (90×) of internal surface of graft after two weeks.

three days exhibited a shiny pink appearance on their internal surfaces which proved microscopically to be due to deposition of a layer of fibrin. Those studied at one week showed a similar layer of fibrin and the interstices were also filled with platelet thrombus.

At two weeks, the internal surface exhibited little gross difference from the one week specimens. Externally, however, the grafts were coated with a wall of fibrous tissue which was continuous with adventitia proximal and distal to the graft. Microscopically the interior of the graft at two weeks was again coated and the interstices filled with fibrin (Fig. 3). At three weeks the grafts showed a gross appearance very similar to that at two weeks (Fig. 4). Microscopically, however, the first indication of endothelialization of the interior of the tubes was seen at this time. The interstices of the nylon near the anastomoses were infiltrated with proliferating fibroblasts and there was extension of this fibrous tissue along the graft beyond the anastomoses for a distance of 1 mm. Beyond this the graft was coated with fibrin only. Again there was a thick layer of vascular fibrous tissue external to the graft which fused with adjacent adventitia. A few foreign body giant cells were seen but there was no appreciable inflammatory response to the nylon-polyethylene material (Fig. 5).

The next graft studied was removed at ten weeks. This was an abdominal segment of 2.5 cm. length which grossly was inseparable from adjacent aorta. Again a well-developed fibrous tube fused with adventitia enveloped the graft. Internally a layer of endothelium-lined fibrous



Fig. 4. Gross specimen removed after three weeks.

tissue was seen to cover all of the graft except the central 1 or 2 mm. In this area the graft was covered by fibrin alone.

Hence, it appeared that the changes incident to the introduction of nylon-polyethylene tubes began with the deposition of a layer of fibrin on the internal surface. With passage of time this was replaced by fibrous tissue which ultimately became lined with cells having an endothelial appearance. Externally the grafts became coated with a vascular fibrous layer which was inseparable from proximal and distal adventitia. The entire process has been referred to as arterialization of the graft.

Case Reports

In view of the favorable results seen in the experimental laboratory, it appeared that attempts at clinical application were justified. To date,

two nylon-polyethylene grafts have been used at our institution for replacement of the abdominal aorta and aortic bifurcation. A brief report of these cases follows.



Fig. 5. Microscopic view (90×) of graft after three weeks, showing fibrous tissue growth and endothelium lining internal surface.

The first nylon-polyethylene graft was used in a fifty-eight-year-old man with a Leriche syndrome. This patient underwent resection of the abdominal aorta and bifurcation from the level of the inferior mesenteric artery to the external iliac arteries. A preconstructed graft was used as a replacement. Because of the extensive disease proximal to the graft, however, good flow into the nylon-polyethylene tube could not be established and femoral pulses were never restored. However, the patient is living and has tolerated the foreign body material without complication. Moreover, his vascular disease has remained stable over a six-month follow-up period.

The second patient was a sixty-year-old man who had an aneurysm of the abdominal aorta. This extended from the renal to the common iliac arteries and was found to be dissecting in the region of the left common iliac. This lesion was also resected and a nylon-polyethylene graft, tailored at the operating table, was introduced (Fig. 6). The graft distended readily with blood following release of the clamps, pulsated well, and transmitted good femoral pulsations. However, the patient suffered an extension of a previous myocardial infarct in the postoperative period and expired. Good femoral pulses were present until death. At autopsy, there was no indication of hemorrhage from the graft and the structure was patent.



Fig. 6. Nylon-polyethylene prosthesis in place.

Discussion

It appears that the applicability of non-viable materials in aortic replacement is an established possibility. The advantages of such substances as nylon are apparent from our work and also from the reports of previous investigators. Nylon is economical, freely available, easily stored and readily sterilized. It has the further advantage of being well tolerated by the patient and of undergoing arterialization. In addition, such cloth-like materials may be tailored at the operating table. Thus, one may fashion a graft which readily conforms to the diameter and length necessary in a given situation. Unfortunately, time has not permitted evaluation of durability, but to date there has been no indication of disintegration or aneurysm formation.

It appears that the calibre of the vessel is an important consideration in its evaluation for a nylon prosthesis. Since the femoral grafts in this study were clotted in 60 per cent of the animals, the use of such grafts in small peripheral vessels cannot be recommended. However, the high percentage of patency in the aortic grafts leads us to anticipate application of these tubes as substitutes for the diseased aorta. Whether such non-viable grafts will prove to be more satisfactory than homografts remains to be seen. In any case, it is our contention that the future progress in aortic grafts lies in non-viable material. While our results indicate that polyethylene-nylon grafts are satisfactory, we are studying other material in the hope that they will have added advantages.

(Continued on Page 572)

Coagulation Homeostasis

By Earl A. Peterman, M.D.
Detroit, Michigan

I. Observations on Anticoagulant Therapy, Thromboplastin Insufficiency, and Plasma Fibrinogen Levels in Intravascular Clotting

THROMBOPHLEBITIS and thromboembolism continue to show a high mortality and morbidity, although much has been accomplished in the control of these conditions with anticoagulants in the past decade. However, the methods and principles of anticoagulant treatment have not been fully accepted by the profession, probably because of serious drawbacks associated with it. The present state of acceptance of anticoagulant therapy has been well summarized in a recent article by Schnur.[1] His remarks probably apply not only to mycardial infarctions but also to the problem of intravascular clotting in general. He states that "the problem is not which anticoagulant to use but rather which patient to treat. . . . The solution of this problem would lead to more rational therapy in which possibly 10 per cent of patients would be treated with 100 per cent effectiveness instead of routine treatment of all patients, presently advocated by some, which may be effective in only 10 per cent of the cases." His statement to a large extent reflects the current consensus of opinion in regard to anticoagulant therapy.

The difficulties encountered with anticoagulant therapy are inherent in the method itself and exist regardless of which anticoagulant is used. The intent of anticoagulant therapy is to render the blood less coagulable and thereby stop formation and spread of intravascular clotting. Anticoagulants such as heparin or dicumarol are administered up to the point of individual tolerance, at which time the blood exhibits very little coagulating ability. The factor of safety between the desired therapeutic effect of the anticoagulant and the production of an outright hemorrhagic syndrome is very small, a situation which explains the hazardous nature of the treatment and accounts for the poor results in inexperienced hands.

The main drawback to the development of better anticoagulant therapy is that the hypothesis upon which it is based lacks consideration for the natural physiologic balances and counterbalances which control the coagulation mechanism. In order to be effective, anticoagulant therapy must overpower and hold in abeyance the natural balances which ordinarily function in maintaining a normal coagulability in the blood. The elimination of these natural controls creates real dangers regardless of the skill with which it is done.

In normal physiology the clotting time of the blood is maintained to within rather narrow limits by a delicate system of balances and counterbalances spoken of as homeostasis.[2] One of the mechanisms in this complicated system of homeostasis is the reciprocal balance between the amount of fibrinogen in the plasma and the activity of the thromboplastin mechanism. The amount of fibrinogen in the plasma is a resultant function of homeostasis and regulated inversely proportional to the state of activity existing in the thromboplastin mechanism at the time. When the activity of the thromboplastin mechanism is increased the fibrinogen simultaneously drops and when the activity of the thromboplastin mechanism goes down the fibrinogen goes up. This reciprocal relationship aids in maintaining normal coagulation by maintaining the proper balance between the physiologic forces which produces hypo-coagulability on the one hand and hyper-coagulability on the other.

With these concepts of the natural physiologic balances in mind, several important observations on anticoagulant therapy and intravascular clotting have been made. The first observation of importance was that heparin administered in large amounts as an anticoagulant caused a compensa-

From the Department of Surgery, Providence Hospital, Detroit.

tory increase in the plasma fibrinogen level. The aim of anticoagulant therapy is to reduce the ability of the thromboplastin mechanism to convert fibrinogen to fibrin. Heparin accomplishes this result because of its ability to inactivate thromboplastin itself. As the thromboplastin is inactivated, the equilibrium between thromboplastin and fibrinogen is disturbed, and in order to maintain normal clotting in the blood, the fibrinogen goes up to compensate for the weakened activity in the thromboplastin mechanism. The anticoagulant action of heparin, therefore, not only inactivates thromboplastin but also increases the plasma fibrinogen as a result of the thromboplastin inactivation.

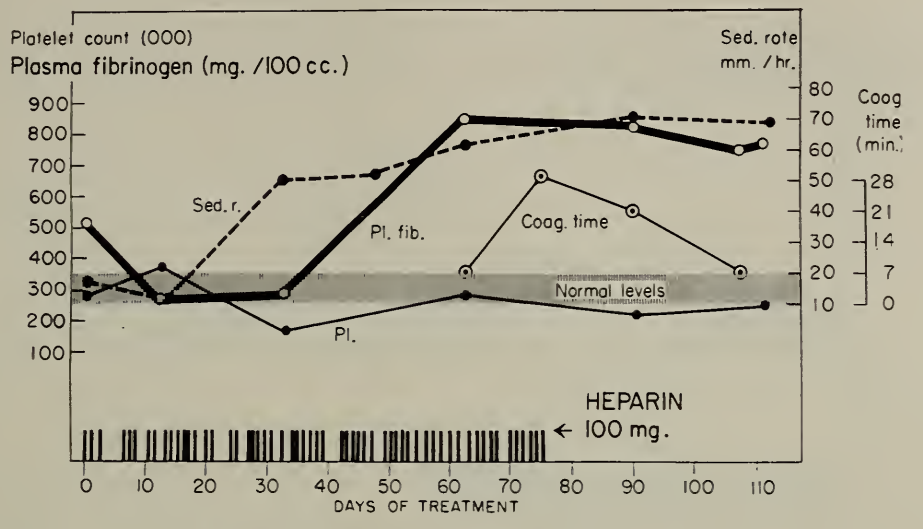


Fig. 1. The effect of heparin on the plasma fibrinogen level in a forty-nine-year-old man with acute recurrent thrombophlebitis. The initial drop in the fibrinogen was interpreted to indicate a deficiency of heparin in this patient. As replacement therapy reached the normal physiologic level the heparin then acted as an antithromboplastin causing a compensatory rise in the plasma fibrinogen. Failure of the fibrinogen level to return to normal after the heparin was stopped indicated an inadequate thromboplastin formation.

The elevating effect of heparin on the plasma fibrinogen is illustrated in Figure 1, made from data obtained from a forty-nine-year-old man with recurrent thrombophlebitis. The first effect of the heparin treatment, however, was to cause a drop in the fibrinogen. This drop was interpreted in conformance with previous work[3] to indicate an existing deficiency of heparin. This finding may account for some of the good results obtained with heparin treatment. At any rate the heparin did not act as an antithromboplastin during the first month of treatment, but it did begin to act as an antithromboplastin, as shown by an increase in the fibrinogen during the second month of treatment. The amount of fibrinogen increased considerably, long before the coagulation time was influenced, which demonstrated the tremendous compensatory power of the homeostatic mechanism. When the heparin was stopped, the plasma fibrinogen remained high.

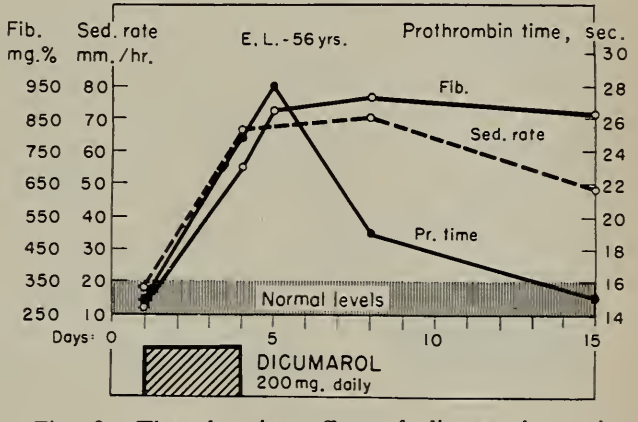


Fig. 2. The elevating effect of dicumarol on the plasma fibrinogen level in a fifty-six-year-old man with recurrent thrombophlebitis in remission. The compensatory rise in the fibrinogen caused by three days' treatment with this anticoagulant did not return to normal after the drug was stopped. The persistent high fibrinogen level after the prothrombin time returned to normal indicated an impaired thromboplastin mechanism.

The second observation of importance was that anything which interfered with or reduced the activity of any necessary part of the thromboplastin mechanism caused a compensatory rise in the

plasma fibrinogen. Bishydroxycoumarin and its homologues weaken the thromboplastin mechanism indirectly by the inactivation of vitamin K which is necessary to the formation of prothrombin.

fifty-six-year-old man with recurrent thrombophlebitis in remission. The plasma fibrinogen increased sharply along with the prothrombin time, which nicely demonstrated the operation of

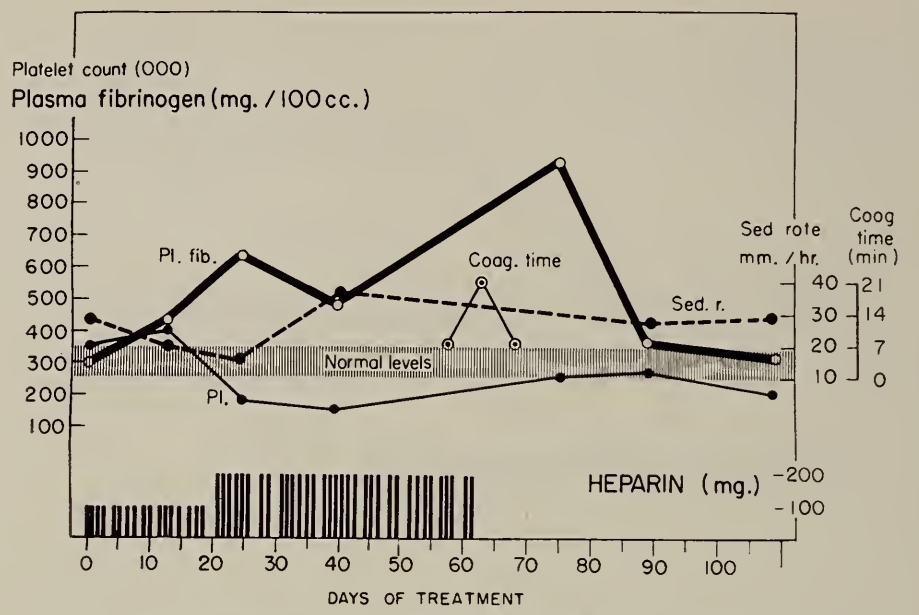


Fig. 3. Physiologic effect of heparin in a thirty-six-year-old man who had never had thrombophlebitis. The plasma fibrinogen level increased immediately in response to the anticoagulant effect of the heparin on the thromboplastin mechanism, which indicatd that a heparin deficiency did not exist. The fibrinogen level dropped to normal when the heparin was stopped, which indicated a normal thromboplastin metabolism.

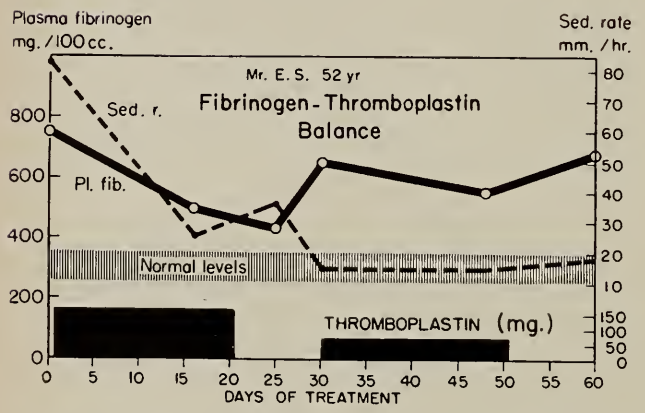


Fig. 4. Graphic presentation of data obtained on a patient with acute recurrent thrombophlebitis showing the reducing effect of thromboplastin therapy on the plasma fibrinogen level. The persistent high fibrinogen level demonstrates the physiologic imbalance in fibrinogen-thromboplastin homeostasis existing in patients with chronic recurrent thrombophlebitis, indicating an insufficiency in thromboplastin metabolism.

Prothrombin is a very necessary part of the thromboplastin mechanism. An illustration of the elevating effect of dicumarol therapy, for instance, on the plasma fibrinogen level is shown in Figure 2, made from data obtained from a

the homeostatic mechanism in increasing the fibrinogen to compensate for the crippling effect of vitamin K inactivation on the thromboplastin mechanism. The plasma fibrinogen did not return to normal with the prothrombin time.

The third observation of importance was that patients with intravascular clotting had an associated hyperfibrinogenemia. In a series of twenty-three consecutive cases yet to be reported the plasma fibrinogen showed a very significant elevation.

The fourth observation of importance was that administration of oral homologous thromboplastin reduced both the hyperfibrinogenemia and the intrinsic inflammatory process in the veins (see case report and Figure 4).

The fifth important observation was that patients with intravascular clotting showed evidence of an insufficiency in thromboplastin metabolism. In the first place the fact that hyperfibrinogenemia was associated with intravascular clotting showed weakness in the thromboplastin mechanism. The increased fibrinogen was a compensatory measure created by nature in an

attempt to insure normal clotting ability of the blood in the presence of insufficient thromboplastin activity.

Evidence of thromboplastin insufficiency was also shown by the persistent elevation of the plasma fibrinogen level after the heparin was stopped in Figure 1, and after the dicumarol was stopped in Figure 2. In these cases the fibrinogen level failed to return to normal from where it started before anticoagulant therapy was given. Since the normal individual was able to form adequate thromboplastin to cause his fibrinogen level to return to normal under similar circumstances, as in Figure 3, the persistent elevation of the fibrinogen in patients with intravascular clotting indicated that they were unable to generate enough thromboplastin for their own needs.

The most compelling evidence that patients with intravascular clotting have an insufficiency in the thromboplastin mechanism was the clinical and laboratory response obtained with thromboplastin therapy. The administration of thromboplastin showed a clinical response within twenty-four hours. The signs and symptoms of acute thrombophlebitis were reduced to normal practically on a predictable schedule. The plasma fibrinogen level returned toward normal as the coagulation mechanism came into balance. These effects of thromboplastin treatment in acute thrombophlebitis are illustrated by the following case report.

Case Report

Case 1.—E. S., a man aged fifty-two, entered the hospital November 15, 1953, complaining of severe pain and swelling of the left leg which developed without apparent cause. He had suffered a similar attack fourteen years previously, following a left inguinal herniorrhapy and another attack four years ago.

Examination.—The patient appeared pale and evidently ill. Oral hygiene was poor. The gums were spongy and inflamed. Three of the remaining nine teeth were loose, and three roots could be seen at the gum margin.

The chest had normal expansion with a respiration rate of 20. Blood pressure was: systolic 138 mm. Hg, diastolic 78 mm. Hg. The rate was 86 per minute. There were no murmurs heard.

The abdomen had a left inguinal herniorrhaphy scar, otherwise normal.

The left leg was flexed at the knee because of the pain in straightening it out. Dorsiflexion of the foot increased the pain. The posterior portion of the lower leg was swollen, reddened, hot, and painful. From the posterior medial aspect of the left knee a reddened area extended up the leg over the course of the great saphenous vein. The surface redness faded about midthigh but hardened vein could be palpated almost to the groin.

Laboratory Data.—Hemoglobin was 13.0 gm., red blood cells 4,180,000, white cells, 6,600, neutrophils 60, nonfilamented 3, lymphocytes 37, eosinophils 3, erythrocyte sedimentation rate 82 mm. in one hour. Plasma fibrinogen was 770 mg. per cent. Serum glucosamine was 140 mg. per cent.

Treatment.—Oral thromboplastin* and ligation of the great saphenous vein at the sapheno-femoral junction.

Course in the Hospital.—The first effects of thromboplastin therapy were noted within twenty-four hours. The pain and soreness were decidedly lessened and the redness over the inflamed veins began to fade. In forty-eight hours the redness had faded to a brownish discoloration, and the patient was able to walk about the ward. A moderate amount of edema developed around the left ankle but otherwise the patient made an uneventful recovery. He was transferred to outpatient care at the end of the first week.

Outpatient Course.—Thromboplastin therapy was continued for a total of twenty-one days. On the twenty-fifth day the plasma fibrinogen was down to 410 mg. per cent, and the edema of the ankle had cleared up. The patient returned to work. Another fibrinogen check was made on the thirtieth day. Although the patient was clinically well the fibrinogen had increased to 650 mg. per cent. Thromboplastin therapy was again started at one-half the former dosage and continued for another twenty-one days. The fibrinogen dropped to 560 mg. per cent. It was checked again ten days after stopping the thromboplastin and found to be increased to 675 mg. per cent. He has remained clinically free from thrombophlebitis since, regardless of the increased fibrinogen.

Comment

The reciprocal balance between fibrinogen and thromboplastin in the mechanism of homeostasis of blood coagulation is well illustrated in Figure 4, made from data obtained in the study of this patient. In the acute attack the plasma fibrinogen was high and the patient was clinically ill with swollen, reddened, and painful veins in the leg. The high fibrinogen physiologically indicated a low activity in the thromboplastin mechanism

*Thromboplastin (as Thromboplex) was supplied by Drug Industries Company, Detroit.

and as soon as thromboplastin was administered the phlebitis receded. Within twenty-four hours the pain had stopped, and the hot, reddened and swollen areas subsequently disappeared.

While the amount of thromboplastin given this patient was adequate to stop the acute inflammatory process in the veins it was not adequate to completely balance the clotting mechanism as shown by the fact that the fibrinogen level at no time reached normal. As soon as the thromboplastin treatment was stopped, the fibrinogen level quickly increased, which indicated that this patient was not producing enough thromboplastin for his own needs or that some factor was inactivating his thromboplastin faster than his body could synthesize it. At any rate the insufficiency in the thromboplastin mechanism shown in Figures 1 and 2 was also shown in this patient by the persistent hyperfibrinogenemia. The persistent high level of fibrinogen does not appear to cause any pathologic sequelae unless trauma, stasis, inflammation, or some other precipitating factor coincides with it.

It is not difficult to visualize intravascular clotting where more than twice the normal amount of readily coagulable protein is circulating in the blood, but it is somewhat more difficult to visualize the profound effect of exogenous thromboplastin in allaying the acute inflammatory process in the vein wall and the surrounding fibrous tissue. The apparently specific effect that thromboplastin administration had on more than twenty-three cases of phlebitis strongly indicates that both the intrinsic inflammation in the vein wall and the hyperfibrinogenemia were caused by an insufficiency in thromboplastin metabolism.

The increased amount of fibrinogen found in the plasma of patients with intravascular clotting is very significant from two standpoints. The first is that the overload of coagulable protein in the circulation may contribute to thrombus formation, and the second is that it gives a clue to the probable pathologic physiology upon which the intrinsic inflammation in the vein wall develops. The amount of fibrinogen in the plasma taken as a measure of the imbalance in the blood coagulation mechanism points to an insufficiency in thromboplastin metabolism as the cause of the imbalance. The validity of that indication was strengthened by the apparently specific reduction in the plasma fibrinogen level and the immediate response of the acute inflammation to thromboplastin treatment.

These observations point to the need to reevaluate the physiologic basis for the administration of anticoagulants. Heparin inactivates thromboplastin directly and produces a compensatory rise in the plasma fibrinogen. The coagulation time is normal in these patients and remains so until homeostasis can no longer balance the loss of thromboplastin by increasing the fibrinogen. The conversion of a normal coagulation time to an abnormally long one is an indication that the range of normal homeostasis is being exhausted and the patient is on the verge of a hemorrhagic syndrome. The administration of heparin causes a paradoxical rise in the fibrinogen which appears to enhance the condition it is intended to cure.

The situation is similar with dicumarol. The prothrombin time is normal in the presence of intravascular clotting before treatment and abnormal after treatment. Dicumarol weakens the thromboplastin mechanism indirectly by inactivating vitamin K and the result on the fibrinogen level is the same. The fibrinogen rises until it can no longer compensate for the crippled thromboplastin mechanism, and hemorrhage results from extreme hypocoagulability. Regardless of which anticoagulant is used, the therapeutic result depends for its effectiveness upon rendering the natural mechanism for the control of hypocoagulability in the body impotent.

On the other hand a consideration of the physiologic balances and counterbalances which constitute the homeostasis of blood coagulation point to weakness in the thromboplastin mechanism as the origin of intravascular clotting. Correction of the weakness with thromboplastin replacement appears indicated.

Summary

Anticoagulant therapy increases the hyperfibrinogenemia already present in patients with intravascular clotting. Thromboplastin therapy reduces the hyperfibrinogenemia, the phlebitis and the intravascular clotting. The evidence at hand indicates that intravascular clotting occurs because of an imbalance in the homeostasis of blood coagulation produced by an insufficiency in thromboplastin metabolism.

Acknowledgment

Grateful acknowledgment is made to the Department of Medical Art, and the Department of Medical Photography, Wayne University College of Medicine, for their help in preparing the graphs for publication.

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II. Acute Thrombophlebitis; Mechanism and Treatment with Oral Thromboplastin

THROMBOEMBOLIC disorders of the coagulation mechanism are characterized by a tendency of the blood to form clots inside the blood vascular system. Since the actual factors in the etiology of intravascular clotting are unknown, anticoagulant therapy has been used more or less empirically to reduce the ability of the blood to clot and thereby retard the progress of the disease. This method of preventing the spread of intravascular clotting carries with it certain inherent dangers of overtreatment hemorrhage, which greatly limit its usefulness, and stimulates further efforts toward a better understanding of the pathologic physiology involved.

In effect, all anticoagulant drugs are directly or indirectly antithromboplastin in their final action. Their effectiveness depends upon the efficiency with which they inactivate or block the action of thromboplastin. Since thromboplastin is necessary to the stability of coagulation homeostasis, blocking its physiologic action not only eliminates the natural factor of safety against excessive bleeding but also creates other serious imbalances in the coagulation mechanism in addition to the ones already present in the thromboembolic disorders.

Following the discovery of an anticoagulant substance in the liver by McLean[1] in 1916, later named heparin by Howell and Holt,[2] the study of its antithromboplastin properties led Jorpes[3] to advocate its use in the treatment of thrombosis. This created the inference that intravascular clotting was caused by too much thromboplastin in the system. Although there is much evidence that increased coagulability of the blood is an important factor in thrombosis, there is no evidence that the increased coagulability is due to an increase in thromboplastin. Nor is there any evidence that the increased coagulability is due to an abnormality in any other part of the coagulation mechanism with the exception of the plasma fibrinogen.

It has been known for a long time that an increase in the plasma fibrinogen was always present in intravascular clotting, but the reason for it was not understood until recent studies[4,5] showed that heparin, protamine sulfate, the coumarin compounds and other antithromboplastin substances cause the fibrinogen level to rise. Likewise, the administration of thromboplastin and other substances which activate, potentiate and support the thromboplastin mechanism caused the plasma fibrinogen level to fall. These observations showed that the plasma fibrinogen level was intimately tied to the functional capacity of the thromboplastin mechanism which pointed up the real significance of the hyperfibrinogenemia found in patients with intravascular clotting. When these findings were interpreted in the light of physiologic homeostasis, the increase in the plasma fibrinogen found in patients with thromboembolic disorders signified that the activity of the thromboplastin mechanism was low—a condition physiologically opposite to the one generally supposed.

Using the plasma fibrinogen level as an index of potential coagulability, and as a guide to therapy, the present report is based on the treatment of a series of patients with acute thrombophlebitis, using oral homologous thromboplastin to physiologically balance the indicated defect in the coagulation mechanism as a corrective measure.

Material and Methods

Patients with acute thrombophlebitis in the lower extremity were chosen for this study for several reasons. Thrombophlebitis is more common in the legs than elsewhere in the body, and since the disease is essentially the same regardless of where it occurs, these cases may be taken as physiologically representative of thromboembolic disorders in general. Ligation of the great saphenous vein at the saphenofemoral junction blocks off the area under observation and affords an added precautionary measure against untoward results from embolism during the period of recovery. The acutely inflamed veins in the legs are readily available for inspection and palpation so that the early clinical changes due to treatment are open for continuous observation. The increase in the plasma fibrinogen is greatest in the acute stage of the disease and the drop in the fibrinogen level following treatment is more pronounced, which for demonstration purposes eliminates the pitfalls and confusion of the false normal[4] readings which are often encountered in the chronic stage of the disease.

Among other blood studies the coagulation time was done by the Lee-White method, the prothrombin time by the Quick method, the erythrocyte sedimentation rate by the Westergeen method, and the plasma fibrinogen determinations by the method of Ratnoff and Menzie.

Aside from ligating the great saphenous vein in each instance the only other treatment given was oral homologous thromboplastin.* As soon as the examination and the laboratory tests were taken each patient was given 100 mg. of a potent thromboplastin preparation sealed in enteric coated tablets four times daily. Frequent clinical observations were made and the laboratory findings were tabulated.

Results

The results are reported in Table I. There were fourteen women and nine men with an average age of forty-nine years. Twelve of these patients had not had previous attacks, while eleven patients had one or more previous episodes. The most significant finding in the laboratory data was the marked increase in the plasma fibrinogen level. The lowest was 480 mg. per cent and the highest was 1,350 mg. per cent, while the average for the group was 675.5 mg. per cent. Only five of the twenty-three patients had a markedly elevated erythrocyte sedimentation rate while eight were within normal limits with nine moderately elevated. Thromboplastin treatment was administered from seven to seventy-eight days with an average of 26.3 days. Six of the patients were transferred to the group for long term study on 200 mg. of thromboplastin daily as a maintenance dosage to prevent future attacks. All members of the group have remained well during the period of observation since discontinuance of treatment. One patient, Case 17, died from unrelated causes eleven months after discontinuing therapy. There were no withdrawal symptoms noted in this series.

The most significant clinical finding was the apparently specific effect of the thromboplastin treatment on the acute inflammatory process in and around the affected veins. The recovery pattern followed approximately the same path in each case varying only in the length of time required. In from eighteen to twenty-four hours after the thromboplastin treatment was started the acute fiery red inflammation in and around the veins involved began to change color. Fading a little at first, the fiery red color changed to a brownish tint as the swelling began to subside, and this was associated with marked relief from pain and tenderness on palpation. In the period from twenty-four to thirty-six hours of treatment, the brownish color deepened as the redness completely disappeared and the swelling around the veins continued to recede. In forty-eight hours, the swelling diminished to a brawny induration with only slight tenderness on pressure. Beyond the forty-eight-hour period convalescence continued at a different rate for each patient depending upon the clinical conditions associated with the thrombophlebitis. Case 1 and Case 12 each had an extended convalescence period complicated by surgical procedures and are reported more in detail.

Case Reports

Case 1.—J. G., a white man, aged forty-two, was admitted to Providence Hospital on October 31, 1953, with extensive second and third degree burns of the neck, back, chest, left arm, and left side of the body. Approximately one-fifth of the body area was involved.

Course in the Hospital.—The burned area was debrided by irrigation and he was treated for shock. He

*As used in this study thromboplastin as "Thromboplex" was supplied by Drug Industries Company, Detroit.

TABLE I. DATA ON 23 PATIENTS WITH ACUTE THROMBOPHLEBITIS TREATED WITH ORAL HOMOLOGOUS THROMBOPLASTIN

Case	Patient	Age	Sex	Part Involved	Previous Attacks	Fibrinogen mg./100 c.c. Plasma	Sedimentation Rate	Days of Treatment	Fibrinogen mg./100 c.c. Plasma	Sedimentation Rate	Remarks
1	J.G.	42	M	Both legs	0	788	56	78	340	28	Severe 3d° body burns. Bilateral massive thrombophlebitis of the legs began to develop 40 days post-accident. Heparin failed to stop the spread. The response to thromboplastin therapy was immediate and rapid. See case report.
2	V.R.	49	Fe	Left leg	0	680	26	21	330	14	Massive acute thrombophlebitis followed trivial injury to left midthigh. Immediate and rapid response to thromboplastin therapy.
3	E.L.	56	M	Both legs	2	814	43	28	435	20	Acute exacerbation of a chronic recurrent thrombophlebitis. Marked improvement first 48 hours of thromboplastin treatment. Continued to complete recovery.
4	R.M.	49	M	Right leg	1	746	34	24	390	18	Rapid improvement first 24 hours. Complete recovery.
5	F.S.	58	M	Left leg	2	710	82	21	345	24	Attack began to subside in 18 hours. Complete recovery.
6	E.R.	55	Fe	Right leg	3	580	38	30	300	12	Pain stopped in 24 hours. Inflammation cleared in 48 hours. Maintenance therapy to prevent recurrence.
7	H.S.	41	Fe	Left leg	4	790	62	19	410	30	Acute flare-up in post-phlebitic syndrome. Immediate response to thromboplastin treatment. Discharged on maintenance therapy.
8	J.S.	56	Fe	Right leg	1	520	18	20	230	12	Rapid and complete recovery.
9	A.S.	43	M	Both legs	0	490	12	18	210	8	Rapid and complete recovery.
10	H.A.	70	Fe	Right leg	3	505	23	43	340	15	Acute flare-up in post-phlebitic syndrome. Chronic ulcer formation. Effects of thromboplastin treatment noted in 36 hours. Complete recovery. Ulcer healed.
11	E.B.	56	Fe	Right leg	2	655	19	22	370	10	Acute symptoms began to subside in 24 hours. Complete recovery.
12	G.Y.	28	M	Right leg	0	784	68	53	405	26	Acute massive thrombophlebitis. Oral sepsis. Primary recovery began in 24 hours. Flare-up following tooth extraction. Bloody sputum 5th week. Complete recovery.
13	R.B.	49	Fe	Left leg	3	484	21	14	370	12	Acute symptoms cleared in 48 hours. Continued with maintenance therapy.
14	M.B.	64	Fe	Right leg	0	910	43	36	415	18	Acute attack following slight injury to lower leg. Chronic arthritis. Acute symptoms. Controlled in 24 hours. Arthritic pains continued.
15	R.J.	31	M	Right leg	0	745	38	7	390	20	Acute attack, 3 weeks' post-operative bowel obstruction and intravenous feeding. Symptoms cleared completely in 24 hours.
16	A.C.	56	Fe	Right leg & pelvis	1	480	16	21	240	8	First attack 8 months previously after cholecystectomy required 3 months in bed. Flare-up cleared completely in 21 days. First effects seen in 18 hours.
17	V.E.	58	Fe	Both legs	0	1350	96	30	505	36	Acute thrombophlebitis 3 weeks post-splenectomy. Dramatic response began in 18 hours with marked drop in fibrinogen.
18	W.F.	40	M	Right leg	0	760	34	28	315	19	First effect of thromboplastin treatment noted in 18 hours. Quite marked in 24 hours.
19	A.M.	36	Fe	Left leg	0	618	26	21	320	12	Rapid response. Complete recovery.
20	G.W.	61	Fe	Left leg	1	724	18	18	408	10	Acute symptoms began to subside in 24 hours. Good recovery. Discharged on maintenance therapy.
21	H.R.	32	Fe	Right leg	0	510	23	21	345	14	First response noted in 24 hours. Complete recovery.
22	A.P.	44	M	Left leg	0	490	15	14	315	12	Acute symptoms subsided in 24 hours. Complete recovery.
23	M.R.	54	Fe	Right leg	0	605	16	21	345	14	Responded to treatment in 24 hours. Complete recovery.
Average		49			1	675.5	35.5	26.3	351	17.0	

recovered well from the initial shock and became ambulatory by the end of the second hospital day. The first dressing was changed on the fifth day and then daily thereafter. The healing process appeared delayed, otherwise normal. By the thirty-ninth hospital day the slough appeared complete with sufficient granulation tissue suitable for skin grafting. On the fortieth day the patient began to complain bitterly of pain in the inner aspect of the left mid-thigh and lower leg. Within twenty-four hours the course of the superficial veins became swollen, red, and very painful to touch. A diagnosis of acute thrombophlebitis was made and 200,000 units of depo-heparin were given intramuscularly. This was repeated each twenty-four hours. In spite of heparin treatment the inflammatory process continued. The right lower leg also became involved and the inflammation continued to spread upward. The constant use of narcotics was necessary to relieve pain.

The plasma fibrinogen was 788 mg. per cent (normal 250 to 350 mg. per cent). On the fifth day of the

acute process, heparin therapy had failed to halt the spread and the patient by that time had bilateral massive thrombophlebitis extending up to the groin. Since an increase in heparin treatment was contraindicated because of the large open raw surface from burns, it was decided to discontinue it and institute thromboplastin therapy. Within twenty-four hours the response was evident by a definite decrease in pain and a change from fiery red to a dull brownish tint over the course of the inflamed veins. Within forty-eight hours after the beginning of thromboplastin treatment the pain had disappeared completely and the acute phlebitis had receded to a brawny induration which was only somewhat tender to touch.

On the third day of treatment bilateral high saphenous ligations were carefully done at the saphenofemoral junction under local anesthesia. Upon severing these veins, massive thrombi oozed out. The surgery was accomplished without incident and the thromboplastin treatment continued. The first plastic surgery and skin grafting was begun twelve days after the bilateral saphenous ligations. The tissues appeared to heal rapidly with nearly 100 per cent take of the grafts. Thromboplastin therapy was continued for seventy-eight days during the remainder of his hospital stay, during which time the patient underwent a series of skin grafting operations. He was discharged in good condition and has remained well since.

Case 12.—G. Y., a man, aged twenty-eight, entered the hospital complaining of severe pain and swelling in the left leg and thigh.

Examination.—On inspection the leg showed some general swelling while the area over the course of the great saphenous vein showed considerable swelling associated with a fiery redness that was hot to touch and painful to palpation. This extended from the lower third of the lower leg to the groin. The remainder of the physical examination showed no other abnormalities except severe oral sepsis.

Course in the Hospital.—The leg was elevated on pillows with icebags overlaying the swollen great saphenous vein. Morphine was used for pain. The great saphenous vein was ligated under local anesthesia and thromboplastin treatment was started. Within twenty-four hours the patient was more comfortable and required no further injections of morphine. The redness began to fade and change to a brownish tint. In forty-eight hours, the swelling over the great saphenous vein had receded to a brawny induration which was only slightly tender to touch. The patient became ambulatory thereafter and was transferred to out-patient care on the fifth day.

Outpatient Care:

The patient developed a painful abscessed tooth during the third week. Following its extraction a mild recurrence of the pain and swelling in the left leg was noted which subsided in less than four days without change in the thromboplastin treatment. Although a small amount of swelling persisted about the left ankle, the patient's request to return to work was granted at the end of the fourth week. During the fifth week he developed an annoying cough with blood-tinged sputum, which lasted for five days and spontaneously subsided. No further indications of pulmonary embolism developed and thromboplastin treatment was discontinued on the fifty-third day. He has remained well and at work since.

Comment

The information leading to the therapeutic application of thromboplastin in acute thrombophlebitis was accumulated during the progress of other investigations, portions of which concern the factors which influenced the plasma fibrinogen level to rise or fall.[6] The results of those investigations could be summarized by stating that factors which weakened the thromboplastin mechanism caused the plasma fibrinogen level to rise, whereas factors which activated, supported or potentiated the weakened thromboplastin mechanism caused the hyperfibrinogenemia to recede. It was concluded that the plasma fibrinogen level was regulated in the coagulation system by the physiologic processes of homeostasis and maintained inversely proportional to the physiologic activity in the thromboplastin mechanism. Protamine sulfate, heparin, heparin-like substances and the coumarin compounds are all known to inactivate or block the action of thromboplastin. The administration of all these substances produced a rise in the plasma fibrinogen.

On the other hand, procedures designed to activate, potentiate and support the physiologic activity of the thromboplastin mechanism were found to produce a drop in the fibrinogen level. The physiologic effects of homologous thromboplastin administration were foremost in this respect.

The accumulation of information connecting the plasma fibrinogen level to the activity of the thromboplastin mechanism brought a different outlook on the problem of intravascular clotting. Since the defect in the coagulation system in acute thrombophlebitis was characterized by an increase in the plasma fibrinogen, the cause of the increase, according to our knowledge of homeostasis, was indicated to be an insufficiency in the physiologic function of thromboplastin.

The normal potential coagulability of the blood is created by the presence of a normal amount of fibrinogen, since blood without fibrinogen will not

clot. It is reasonable, therefore, that an excess of fibrinogen creates a state of potential hypercoagualability which conditions the blood for intravascular clotting when trauma, stasis and other factors set the stage. Measures designed to reduce the potential hypercoagulability by reducing the amount of fibrinogen in the circulation forms a rational basis for therapy. Direct reduction of the plasma fibrinogen level by the intravenous injection of thromboplastin is potentially dangerous because it brings about the conversion of the fibrinogen to fibrin which may further enhance the thrombosis. However, the indirect administration of thromboplastin by the oral route appears without danger, because it reduces the hyperfibrinogenemia by way of correcting the imbalance in the homeostatic mechanism. The formation of excess fibrinogen is thereby inhibited physiologically.

The physiologic results of the therapeutic application of thromboplastin in acute thrombophlebitis actually exceeded the original expectations. Thromboplastin therapy not only reduced the hyperfibrinogenemia as estimated, but it also reduced the intrinsic inflammatory process in the vein wall. The latter was accomplished much more rapidly than the former. After observing the physiologic effects of thromboplastin therapy in these twenty-three patients with acute thrombophlebitis, the conclusion seems warranted that not only the hyperfibrinogenemia but also the acute phlebitis was caused by a thromboplastin deficiency.

Indications of the specificity of thromboplastin treatment were observed in several ways. They were manifested by a prompt clinical improvement in all cases, which was associated with visual evidences of healing of the inflammatory process as well as a significant drop in the plasma fibrinogen. In addition, because of the physiologic nature of the treatment, contraindications and untoward side effects were not found. Also, there were no withdrawal symptoms or immediate recurrences when the treatment was stopped.

On the basis of the present information the routine preoperative determination of the plasma fibrinogen level seems indicated as a screening measure to find the individuals most susceptible to thrombosis and embolism after surgery. Patients showing an increase in the plasma fibrinogen are being given oral thromboplastin to reduce the potential hypercoagulability of the blood as a prophylactic measure. The results will form the basis of a future report.

Summary

Each of a series of twenty-three patients with acute thrombophlebitis had a significant increase in plasma fibrinogen which indicated a serious imbalance in the homeostasis of the coagulation mechanism. Successful thromboplastin therapy to correct the defect was based upon the physiology of homeostasis, since the physiologic imbalance appeared to be caused by an insufficiency of thromboplastin.

The specificity of thromboplastin treatment was manifested by a drop in hyperfibrinogenemia, prompt general clinical improvement, immediate appearance of signs of healing in the acute inflammatory process in and about the vein wall and the absence of any untoward side effects. There were no contraindications found, nor were there any rebound symptoms or immediate recurrences when the treatment was stopped.

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13700 Woodward

Early diagnoses of pelvic malignancies make mandatory bi-manual examination of the pelvic organs and biopsy of any abnormal cervical lesion.

* * *

Most complications of pregnancy are greatly increased as a result of myomata being present in the uterus.

Far too frequently the urologist can be condemned for not insisting on biopsy of the prostate.

* * *

Since there are no early symptoms, it is obvious that only by education of physicians in general can one hope to find more operable prostatic cancer.

New Concepts of the Pathogenesis of Hypertension

By Irfan M. Gurevin, M.D.
Detroit, Michigan

ELEVATION of arterial blood pressure has been recognized since Von Basch found a simple method of measuring blood pressure in human beings fifty years ago. However, several observers prior to this discovery described findings in autopsy materials attributed to hypertension. For example Bright in 1836 published his view that some large heavy hearts were found in his patients with renal disease. Forty years after Bright's observations, Mahomed in England described hypertrophy of the heart in patients with the "pre-albuminuric stage of Bright's disease." He thought that the hypertrophy of the heart was due to the increase of blood pressure in the earlier stage of Bright's disease.

It is generally accepted that hypertension is a sign of disease, as is fever, leukocytosis or headache. They are signs of disease and do not constitute a specific disease entity.

There are two main groups of hypertension: hypertension of known etiology and hypertension of unknown etiology.

The first group is subdivided as follows: (1) renal hypertension, (2) cerebral or neurogenic hypertension, (3) endocrinal hypertension, and (4) cardiovascular hypertension.

Renal Hypertension

Experimentally the first demonstration that hypertension could be developed by interference of blood flow through the kidneys was done by Bell and Pederson. These authors demonstrated in 1930 the development of hypertension in a rabbit by occlusion of the renal vein and the application of a membrane around the kidney to prevent the development of a collateral circulation. This was the first clear demonstration that interference of blood supply to the kidney might result in hypertension. Chanutin and Ferris in 1932 obtained experimentally hypertension in rats after subtotal nephrectomy. In 1934 Goldblatt and his co-workers produced chronic hypertension in the dog by the partial compression of the renal artery with a metal clamp. This hypertension is not necessarily accompanied by renal excretory failure. The hypertension was stable and associated with normal heart rate and peripheral vasoconstriction.

Three years after Goldblatt's observation, Houssay and Fasciola in 1937 demonstrated that the ischemic kidney liberates a vasoconstrictor substance into the blood. Two years later Braun-Menandez and his associates in 1939-1940 isolated a substance from the renal venous blood of ischemic kidneys. This substance was thought responsible for elevation of blood pressure and it was called "hypertensin." They also found that hypertensin could be formed by the interaction of renin* and human plasma. Page's studies in 1939 also showed plasma is necessary for the activation of renin and he named the substance in plasma "renin activator" or "hypertensinogen." Hypertensin or angiotonin is a polypeptide. Its molecular weight is 2700. It is thermolabile and dialyzable. Its mother substances, renin and hypertensinogen, are thermolabile and non-dialyzable. Renin is an enzyme which catalyzes the reaction of the production of hypertensin from hypertensinogen. Hypertensin is destroyed or inactivated presumably by the proteolytic action of the enzymes present in the blood and extracts of the organs. These enzymes or groups of enzymes are termed hypertensinase. Hypertensin is not specific for mammal animals including human beings.

Leloir in 1940 devised a method for estimation of renin in the blood. By this method an increased renin level in the blood was found in the initial phase of renal hypertension, shock, acute hemorrhagic nephritis and in the acute stages of acute glomerulonephritis. However, in animals with a chronic stage of renal hypertension, with or without insufficiency, as well as in patients with essential or malignant hypertension, renin could not be found by the method of Leloir and his

*Renin is a protein found in the extract of the renal cortex by Tigersted and Von Bergman in 1898.

associates. Braun-Menandez felt that Leloir's method for the determination of renin in the blood was not sensitive enough to detect it, but Fasciolo and Taquini improved Leloir's method 200 times in sensitivity. By this new method a small amount of renin was found in rats and in men with normal blood pressure, but no increase in renin concentration could be detected in the blood of animals or human beings with chronic hypertension. Renin is mainly contained in portion of the cortex of the kidney which lies below the renal capsule. The distal convoluted tubules are found here. According to the studies of Friedman and Kaplan in 1942 and 1943, renin is formed in these tubules. The juxtaglomerular apparatus does not seem necessary for renin formation. The renin content of the kidney is strikingly similar in both kidneys and in the same kidney in different regions. A partial anoxemia of the kidney causes a 100 per cent increase in the renin content of the kidney in 15 to 30 minutes. By paper chromatographic analysis Edman found a variety of amino acids in hydrolysed hypertensin solutions: histidine 28 per cent, alanine 3.8 per cent, pyroline 5 per cent, tyrosine 2 per cent, aspartic acid 4.5 per cent, and glutamic acid 5 per cent.**

In clinical medicine, hypertention is seen in cases with renal vascular abnormality. Obstruction of the renal artery or vein and obstructive kidney disease are examples. Hypertensin is not the only hypertensive substance in the blood. In 1942 Crexattos made an important observation that when pepsin is allowed to act on hypertensinogen a pressor substance is formed. This substance is different from hypertensin. Crexattos called it pepsitensin. Red cell hypertensinase ferments rapidly, destroys hypertensin but has no effect on pepsitensin. Braun-Menandez and his associates demonstrated that extracts of the kidney and other tissues contain a substance which destroys hypertensin. They called it hypertensinase. The extract from muscle, liver, and the intestinal mucosa showed a maximum activity between pH 7 and pH 8; however the kidney hypertensinase is effective at pH 4. The reaction between hypertensin and hypertensinase is enzymatic. Intestinal mucosa has the greatest concentration of hypertensinase (1200 to 1600 u.), liver is second (80 u.) and plasma, the least (1 - 4 u.). Red cells also contain a large amount of hypertensinase. Crexattos, Mauriquez and Valuezuela observed in 1942 that some enzymes from yeast inactivate hypertensin. Wheat bran is also a good source of hypertensinase. Richardson and Goldblatt used such extracts and were able to reduce the pressor response to hypertensin.

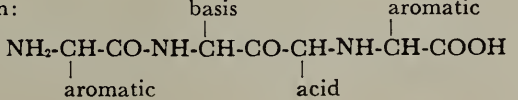
About four to five years ago Zweifach and Shorr discovered a substance in the anoxic kidney. They named it VEM (vaso excitor material). VEM is formed in the cortical portion of the kidney. The VEM level in renal vein was found increased in animals when the renal artery was clamped. VEM potentiates the vasoconstrictor action of epinephrine on the peripheral vessels. VEM is increased in the blood in the beginning of experimental hypertension in the dog; but in the chronic stage it is absent. Shorr and his coworkers have also been able to separate another substance which they called VDM (vasodepressor material) from the blood of animals with experimental hypertension. This material is an iron containing protein called Ferritin. This substance is formed in the liver. VDM neutralizes the effect of VEM in the peripheral blood. It was found increased in hepatic venous blood in animals with experimental hypertension. Other new hypertensive substances were isolated from the blood of hypertensive patients. Stock and Schroeder accumulated evidence of the existence in the blood of two of twenty-three patients with hypertension a substance which causes a prolonged increase of arterial pressure when injected into rats. This substance is not hypertensin or VEM. It consists of amino-like material. Schoeder and Olsen have called this material Phrentasin.† It is a nonprotein amino-like material which is soluble in water, alcohol, and chloroform, but not in purified benzine. It is conjugated with creatinine, sulfuric acid, and amide.

The exact mechanism of renal hypertension still is not understood.

Cerebral or Neurogenic Hypertension

It was observed that electrical stimulation of the anterior lobe of the brain of cats causes increased blood pressure and decreased renal flow. Electrical stimulation of the hypothalamus of cats

**Renin:



†Phrentasin NH_2-CH_2-CO-CH_2-R

also produces hypertension experimentally in animals. The removal of the pressor regulating system, for example, by removal of aortic and carotid sinus nerves also produces hypertension. This type of hypertension is accompanied by tachycardia and increased cardiac output. A vasoconstrictor substance has also been found in the blood of rabbits and dogs made hypertensive by section of the pressor receptor nerves. Braun-Menandez thinks these substances could be epinephrine or its derivatives. Dixon and Heller in 1932 produced hypertension in animals after the injection of a suspension of Kaolin into the intracisternal space. Hypertension was also produced by the production of cerebral ischemia by ligation of carotid, vertebral, and spinal arteries. A psychogenic hypertension was obtained in rats by Farris in 1945 and by Yaekel in 1948 by exposing the rats to daily explosives. However, there is much evidence that the kidney plays a very important role in neurogenic hypertension. Grimson in 1939 demonstrated that the blood pressure is not increased in dogs by excitation of regulator nerves if the kidneys are denervated. Braun and Samet in 1934 claimed that denervation of the kidney prevents hypertension in animals due to intracisternal Kaolin injection. Trueta and his co-workers in 1947 demonstrated that stimulation of renal nerves produces a short circuit in the blood circulation and causes ischemia of the renal cortex. Since the recent work of Introzzi and Fasciolo in 1949 we know the regulation of the nervous system of renal circulation can cause elevation of blood pressure by formation of renin. One can find clinical hypertension from increased intracranial pressure as a consequence of trauma, tumor, or inflammation. It may result also from lesions of the diencephalon and brain stem. The occurrence of hypertension in poliomyelitis and in trigeminal neuralgia may also be related to central nervous system lesions.

Endocrinal Hypertension

Kuhlman in 1939 demonstrated the hypertensive effect of desoxycorticosterone in animals. He has injected 25 mg. of desoxycorticosterone daily into dogs for seventy days and observed an increase of blood pressure, 45 mm. in systolic and 25 mm. in diastolic. In the same year Loeb observed the rise of blood pressure in patients with Addison's disease after giving desoxycorticosterone. Grollman also reported in 1940 the hypertensive effect of desoxycorticosterone on rats. Selye in 1942 showed that desoxycorticosterone causes nephrosclerosis and generalized tissue edema accompanied by cardiac hypertrophy in the chick. In 1943 Selye and Stone observed that high doses of sodium chloride added to drinking water of chicks in combination with the administration of desoxycorticosterone provoked nephrosclerotic changes in the kidney and increase of blood pressure. Sapirstein produced in 1950 hypertension and renal hypertrophy in rats after administering for six weeks a two per cent sodium chloride solution as a drinking fluid. A form of clinical hypertension can accompany hyperplasia of the adrenal cortex or basophilic adenoma of the hypophysis of certain types of adrenocortical tumors. In such cases one finds increased elimination of corticoids in the urine. Hypertension can be improved by the removal of excess cortical tissue. Hypertension in Cushing's syndrome or Cushing's disease belongs in this group.

Cardiovascular Hypertension

Hypertension may occur as a result of coarctation of the aorta, arteriosclerosis, and less commonly in congestive heart failure.

Hypertension of Unknown Etiology

In 1894 Mahomet described enlargement and hypertrophy of the heart in patients without albuminuria. In post mortem examination he could not find Bright's disease. He concluded that those patients had hypertension without Bright's disease and he called this the "pre-albuminuric stage of Bright's disease." After the introduction of the sphygmomanometer into clinical medicine, Volhard and Fahr were especially interested in the study of hypertensive patients with no known renal or endocrine pathology. These authors called this type of hypertension "essential hypertension." Another name introduced by E. Frank was "essential hypertonia."

In the category of essential hypertension one includes several types of hypertension of unknown etiology. Adrenal or other endocrine pathology could not be found in essential hypertension. Arteriosclerotic changes in renal vessels have been described as the cause of hypertension. However, many investigators have found none or slight vascular changes in the renal vessels. Bell and Clawson found no arteriosclerotic changes

in the renal vessels in 10 per cent of their cases of essential hypertension. Wallgren had eight cases of essential hypertension in which the renal arterioles showed no changes. In one of Kauffman's cases with normal kidneys and no arteriosclerosis, the patient was known to have had hypertension for 12 years. The anatomical changes in the renal vessels are not enough to explain the elevation of blood pressure in essential hypertension. Recent studies showed no alteration in the hemodynamics of essential hypertension. For example, in uncomplicated essential hypertension the cardiac output, the blood volume, and viscosity of the blood is normal. In early hypertension the elasticity of the arteries is more or less within normal limits for the particular age group of the patient. The factor responsible for augmented peripheral resistance of the systemic vascular tree is the narrowing of the arterioles. In early essential hypertension the arteriolar narrowing results from generalized arteriolar vasoconstriction; but as the hypertensive process continues, the augmented peripheral resistance becomes partially due to progressive arteriosclerosis which develops in the kidneys, spleen, liver, and brain in decreasing order of intensity.

What is the cause of peripheral vascular vasoconstriction in essential hypertension? Can some hypertensive substances in the blood be responsible for peripheral resistance?

Very detailed studies could not prove that renin or the hypertensin pressor system is responsible for elevation of blood pressure in essential hypertension. Shorr and his associates found equal increases of VEM and VDM in the blood of the patients with essential hypertension. By catherterization of the renal and hepatic veins Shorr and Zweifach could demonstrate extreme increase of VEM in the renal vein and VDM in the hepatic vein. Shorr's studies showed some abnormality in VEM and VDM mechanism in essential hypertension. Shorr believes this abnormality plays a part in the pathogenesis of essential hypertension, because the activity of VEM in peripheral blood of patients with essential hypertension is slightly higher than normal people. Otherwise VEM is not a pressor substance itself. It increases vasomotor activities of epinephrine; and there is no increasing of the pressor effect of epinephrine in essential hypertension. Detailed studies showed neither epinephrine nor pitressin play any role in essential hypertension. Recently Schroeder and his co-workers have found a vasomotor and pressor substance in the blood in renal hypertensive patients. They termed it phrentasin. However, those hypertensive materials have not been found in the blood of patients with essential hypertension.

Finally, one can say that the responsible etiological factors for essential hypertension seem to be entirely different and occult at present. However, diet, race, heredity, environment, stress, weight, and body constitution are important modifying factors in essential hypertension.

Race Factor.—Essential hypertension appears to be less common in those people in whom the normal blood pressure average is low. For example, Harris and others found that essential hypertension is rare among the Chinese and other Oriental people who normally have lower blood pressure. Smirk observed that both normal blood pressure and the incidence of essential hypertension are low among the inhabitants of the Philippines, Puerto Rico and the poorer classes in India. The incidence of hypertension is low in people living in primitive conditions. Nye found hypertension completely absent in the Australian jungles. Dannison concluded that hypertension seldom occurs in the primitive state in Kenya colony; in contrast essential hypertension is very common in Negroes living in large cities in the United States. The incidence of hypertension is also high among civilized Negroes in South Africa.

Hereditary Factor.—Two hundred years ago Morgagni knew that there is a marked predisposition in certain families to cerebral hemorrhage. In recent years statistical and individual studies showed that there is definite evidence of a hereditary factor in essential hypertension. For example, Rosenbloom observed a family in which both parents died from cerebral hemorrhage. Eight of their ten children have hypertension. Children of two hypertensive parents have a 50 per cent chance of developing essential hypertension in later life.

Constitutional Factor.—Essential hypertension especially is accompanied by obesity or diabetes. In some countries gout is frequently found in hypertensive patients.

It is true that the pathogenesis of essential hypertension is still obscure.

(Continued on Page 574)

The "Gamblegram" as an Aid to Electrolyte Study

By Roderick P. MacDonald, Ph.D.
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THE development of rapid, precise analytical methods for plasma electrolytes has increased the frequency of their determination. Harper Hospital Chemistry Laboratory has approximately tripled the daily sodium and potassium determinations during the past two years. Proper evaluation of the tests depends upon an understanding of the fundamental principles of electrolyte balance. There are no simple rules to follow. Electrolyte imbalance is intimately associated with other pathological processes; therefore, it should be considered only with careful attention to the entire clinical picture.

The basic "reference point" for electrolyte study in our laboratory is the "Gamblegram." This set of determinations furnishes the complete information necessary to construct a Gamble acid-base balance chart of blood plasma (Fig. 1). Diagrammatic visualization of the Gamblegram gives the clearest picture of the pathologic physiology involved. The Gamblegram includes the determination of total base, sodium, potassium, carbon-dioxide content, chloride, total proteins, and pH. A separate laboratory package consists of sodium, potassium, carbon-dioxide content, and chloride, and is designed for pediatric use.

The term "milliequivalents" occasionally causes confusion. It is really the only definitive method of expressing the concentrations of body fluid electrolytes. Other units, as milligrams per cent and volumes per cent are unrelated to each other, and comparison between the ions is not possible with these units. The value for milliequivalents per liter is obtained by dividing milligrams per liter by atomic weight and multiplying by valency. A milliequivalent of any cation will combine with one milliequivalent of any anion. Reference to Figure 1 shows 142 mEq. of Na^+ and 103 mEq. of Cl^-. The sodium may combine with 103 mEq. of Cl^-, and 39 mEq. remain, which may combine with bicarbonate ion. One equivalent of a univalent substance exerts a pressure of 1 osmol (unit of osmotic pressure). One equivalent of a univalent substance produces an osmotic pressure of 1 osmol, divalent ions require 2 equivalents to produce 1 osmol. Thus a substance such as NaCl produces a greater osmotic pressure than a like quantity of protein because of the larger number of particles.

This discussion will consider the seven determinations in the Gamblegram.

Total Base

The total base of plasma consists of the sum of the cations shown in Figure 1. It is determined by electrodialysis of blood serum or plasma through a cellophane membrane into a boric acid receiver. The basic solution thus obtained is titrated with dilute HCl. Since the sum of the cations equals the sum of the anions expressed in terms of equivalents, the concentration of total base also equals the concentration of total anions. This test represents the total concentration of plasma electrolytes without reference to the relative concentrations of each. However, the relative amounts of each ion may be calculated precisely only by reference to the total anions or cations present.

The degree of dehydration of the patient should be considered in evaluation of any electrolyte data. In dehydration the electrolytes may appear to increase, whereas the total body stores have actually diminished. Total electrolyte concentration is maintained except in severe acidosis. In cases of acidosis or alkalosis with normal kidney function the total electrolyte concentration will be maintained by the kidney even though there are severe abnormalities in acid-base balance. In the absence of sufficient electrolyte, the kidneys cannot excrete the excess chloride or bicarbonate to overcome the existing acidosis or alkalosis.

Since 91 per cent of the total base consists of sodium ions, the sodium concentration may be used for a rough approximation of total base.

Sodium

The normal concentration of serum sodium ranges from 135 to 153 mEq./L., 98 per cent of the observations falling within this range.[2] Sodium is the primary determinant of tonicity in extra-

cellular fluid. In diabetic ketosis the increased blood sugar may add significantly to the osmolarity of extracellular fluid, and serum sodium is consequently reduced. Studies on experimental salt depletion[3] have shown severe depletion is required before reduced levels of sodium are found. Clinical salt depletion therefore is primarily due to body losses rather than dietary depletion. Losses from the gastrointestinal tract are most common; excess sweating and urine sodium loss may also contribute. Renal failure, adrenal insufficiency, use of diuretics, chronic uremia, and salt-losing nephritis all cause urine sodium loss. Hyponatremia may also be induced by too vigorous sodium depletion during edema, especially in congestive heart failure.[4]

All cases of sodium loss must be evaluated with reference to degree of hydration, in which the primary abnormality is water retention. In these conditions, the sodium will revert to normal when the primary condition is brought under control. An increase of sodium concentration is less common. High serum sodium with low urine sodium has been found after head injury,[5] extracerebral neoplasms,[6] and other conditions involving the depression of consciousness.[7]

If the serum sodium determination is not readily obtainable, it may be roughly estimated by adding 10 to the sum of chloride and bicarbonate ion values expressed in milliequivalents.[8] The

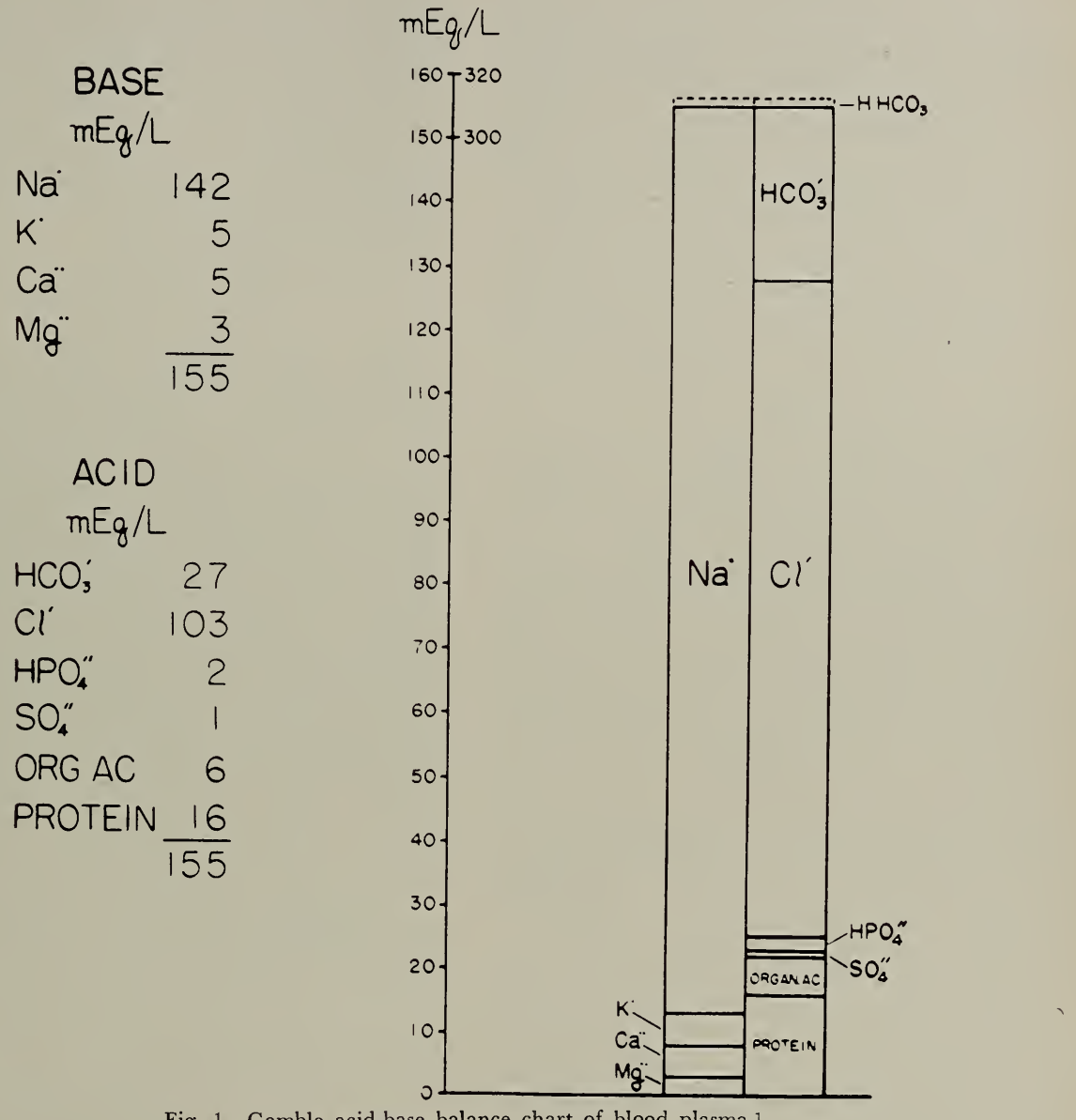


Fig. 1. Gamble acid-base balance chart of blood plasma.[1]

figure 10 must be increased in cases of diabetes (because of ketone bodies) and in nephritis (phosphate retention).

Potassium

The normal concentration of serum potassium varies from 3.5 to 5.6 mEq./L[2]. Normal potassium values vary more than sodium since the homeostatic mechanism is less efficient. In dietary potassium depletion, serum potassium may drop to low levels, but seldom less than 3.0 mEq./L. The comparatively large cellular reserves prevent further losses. Uncomplicated potassium depletion may be caused by sodium retention increasing the extracellular sodium, and with the development of extracellular alkalosis.[9] The alkalosis appears independent of any renal influence and is secondary to passage of Na^+ and H^- ions from extracellular to the intracellular compartment. The increase of serum bicarbonate and pH in potassium deficiency therefore indicates no gain of alkali or loss of acid from the body.

Low potassium levels usually, but not always, indicate potassium depletion. Depletion may occur without significant alterations in the serum potassium concentration, such as in diabetic ketosis, and abnormal loss from the gastrointestinal tract. If the sodium depletion in these cases is corrected, low levels of potassium may be found.

Hypokalemia, as in the case of hyponatremia, is most often found when the ion is lost in gastrointestinal secretions or in the urine. Vomiting will cause greater loss of potassium, since gastric juice has a high potassium content.

The kidney does not conserve potassium as well as sodium. Higher potassium levels are less common since the kidney efficiently excretes this ion. Renal failure may produce a definite hyperkalemia. High serum potassium may also be found in Addisonian crises.

Calcium, Magnesium, and Phosphate

These ions are not determined in the Gamblegram, but Ca and Mg may be estimated by subtracting the sum of sodium and potassium from the total base. Individual analysis of calcium and phosphate is often used for a prognosis in renal failure. The hypocalcemia found in most of these cases is dependent upon hyperphosphatemia. Phosphate retention contributes to some extent to the acidosis of renal failure. Little clinical significance may be attached to serum magnesium values at the present time.

TABLE I. ACIDOSIS AND ALKALOSIS[8]

	pH	CO_2	Condition
Acidosis			
Metabolic	Low	Low	Retention of acid or loss of base
Respiratory	Low	High	Retention of CO_2
Alkalosis			
Metabolic	High	High	Retention of base or loss of acid
Respiratory	High	Low	Loss of CO_2

Carbon Dioxide and pH

The carbon dioxide content of serum as measured in the Van Slyke manometric apparatus includes dissolved carbon dioxide gas, carbonic acid, and bicarbonate ion; the normal carbon dioxide content of plasma is 25 to 32 mEq./L. If pH is normal, the major part of the total carbon dioxide is bicarbonate, thus total carbon dioxide provides a practical estimate of the bicarbonate present. Carbon dioxide content rather than combining-power is measured in this laboratory. When content is determined, the blood is drawn under oil without exposure to air and the normal equilibrium of the carbon dioxide system is preserved. The re-equilibrating necessary when carbon dioxide combining-power is measured leads to various technical errors. If the alveolar carbon dioxide is the same in both the patient and technician performing the equilibration, the carbon dioxide content and combining-power will furnish the same value. In respiratory alkalosis and acidosis, carbon dioxide combining-power may give false results.

The carbonic acid may be differentiated from the bicarbonate by use of the determined pH and the Henderson-Hasselbalch equation. Table I demonstrates how pH and carbon dioxide vary in metabolic and respiratory acidosis and alkalosis.

Alkalosis and acidosis are usually defined in terms of alteration of the bicarbonate ion, following the precedence of Van Slyke and Cullen. In alkalosis, bicarbonate increases and chloride decreases; in acidosis, the reverse occurs. In cases of severe acidosis, large quantities of acetoacetic acid and beta-hydroxybutyric acid are present in the blood, and the anions of these acids plus chloride ions displace part of the bicarbonate ions.

Chloride

The normal concentration of serum chloride varies from 98 to 106 mEq./L. Alterations occur through loss of chloride in stomach contents, retention or loss of carbon dioxide, ketosis, kidney disorders, and a potassium deficiency alkalosis. Alteration in the concentration of either chloride or bicarbonate is associated with a reciprocal change in the other factor. When chloride is lost in gastric contents, there is a compensatory increase in bicarbonate. Primary carbon dioxide retention decreases chloride levels, while a carbon dioxide deficit (as in hyperventilation) increases the chloride. Conditions which raise the level of other serum acids, such as ketosis or renal insufficiency (phosphate retention) may decrease serum chloride as well as bicarbonates. Chloride is increased in nephritis, or nephrosis with ammonium chloride therapy.

Changes in the carbon dioxide concentration of the serum leads to a shift of chloride from plasma to red cells, or in the opposite direction. Therefore blood drawn for chloride determinations should be collected under oil to prevent escape of carbon dioxide. This would cause an increased serum chloride content. Furthermore, serum should be rapidly separated from the cells to avoid a shift from serum to red cells incident to the formation of acid, which occurs in the blood upon standing.

Total Proteins

Serum protein ions contribute to the acidic portion of the electrolyte balance. Because they are in solution at pH 7.4, or on the alkaline side of their isoelectric points, they exist to a certain extent as alkaline salts. Their chief function is the maintenance of normal blood volume and maintenance of normal tissue water content. Depletion of plasma proteins leads to edema, thereby affecting the entire electrolyte concentration. Palpable edema usually develops when the concentration of serum protein falls below 5 grams per cent.

A decrease in plasma protein of 1 gram per cent results in a significant loss of plasma volume. Blood plasma and interstitial fluid differ primarily in the concentration of non-diffusible protein. The total electrolyte equivalents of plasma is greater than that of interstitial fluid by the base equivalents of plasma protein. Fluid moves from the arteries into the interstitial space by heart action. The return flow is provided by the unopposed osmotic differential due to the plasma proteins. This pressure gradient exists because the same quantity of base ion will exert more osmotic pressure when combined with a univalent ion (i.e., Cl^- or HCO_3^-) than it will when combined with a polyvalent protein ion.

The concentrations of plasma protein expressed in grams per hundred milliliters may be converted to milliequivalents per liter by use of the following equation:[10]

$$\text{mEq./L.} = 0.104\ (\text{gm. prot./Liter})\ (\text{pH} - 5.08)$$

In this manner the proteins may be placed in the Gamblegram as one of the anions. They are of interest not only as anions in the electrolyte picture but also as a measure of the water concentration affecting the entire balance.

Summary

Each of the seven determinations which constitute the Gamblegram is discussed. There are no simple rules to follow in interpreting electrolyte balance studies. Each determination must be considered individually, and compared with the total pattern. Construction of a Gamble chart is the simplest method of viewing the entire electrolyte pattern, showing most clearly the interrelationships involved.

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The Electrocardiogram in Periodic Health Appraisal

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A TWELVE lead electrocardiogram was taken as a routine part of the examination of a group of over 4,000 male employes of a Detroit automobile manufacturing plant. These men were subjected to examination for a variety of reasons—they were applying for work, were returning to work after illness, or were scheduled for a periodic health appraisal examination. Thus they can be considered as representative of ambulatory patients as seen in private practice.

The age distribution is shown in Table I. "New employes" refers to those undergoing a preplacement examination. "Hourly" rated refers to skilled and unskilled factory workers. "Supervisory" refers to the white collar class of foremen, clerical workers and executives.

This review begins at age forty because of the findings of a preliminary study conducted on a group of several hundred men mostly under age forty. Abnormal electrocardiogram findings were so rare under age forty that an electrocardiogram was not felt worth the time and expense involved unless there was some clinical indication to order the procedure. The group consists of males only, because few women are employed in heavy manufacturing.

A short history form was filled out by all those examined. Few clues as to the presence of cardiovascular disease were obtained, but since this was in an industrial group, this finding was expected. The miniature chest x-ray also found very few cases of previously unknown cardiac hypertrophy. Physical examination of the cardiovascular system disclosed mainly a significant amount of hypertension. A few cases of congenital and rheumatic heart disease were also discovered, although most of these were already known to the patients. A number of these were young men applying for work as common laborers. Such cases are not accepted for employment as common laborers by most heavy manufacturing plants. This emphasizes the need for completion of as much education as a child with heart disease can possibly absorb, and also draws attention to realistic vocational goals, so that these young people may arrive on the labor market with skill to sell. Cardiac murmurs are no deterrent to employment when they are possessed by individuals whose skill is in demand.

TABLE I. TOTAL RECORDS

Age	40-49	50-59	60-69	70-79	Total
New employes	1,452	149	5	—	2,109
Hourly rated	963	698	440	8	1,606
Supervisory	136	116	39	—	291
Total	2,551	963	484	8	4,006

Blood pressure determinations were made by nurses. This resulted in lower readings than had they been made by physicians. This was repeatedly verified in individual cases. Hypertension was defined for the purposes of this study as a reading in excess of 160/100. Hypertension is a very common finding in this group and should not of itself be considered a deterrent to employment or to continuation of work unless serious complications occur.

A total of 398 abnormalities were found. These were found in 360 individuals, since a number showed several abnormalities. Most of those with left ventricular hypertrophy (LVH) were hypertensive, thus classifying them further as having hypertensive heart disease. No correlation with the height of the blood pressure and the pattern of LVH could be made. The five examples of right ventricular hypertrophy (RVH) were all due to cor pulmonale in persons having bronchial asthma for many years. Nonspecific left ventricular damage (LV damage) was found mostly in men who were hypertensive. In three instances a history of substernal distress on extreme exertion such as shoveling snow in very cold weather was obtained after the examination. These men had not been aware of the importance of their symptoms. The discovery that they had angina

Presented at the 6th Annual Michigan Heart Day of the Michigan Clinical Institute, March 11, 1955, Detroit, Michigan.
This study was supported by a grant from the Michigan Heart Association.

TABLE II. HYPERTENSION*

Age	40-49	50-59	60-69	70+
New employes	73(1452)	15(149)	1(5)	—
Per cent	5%	10%	20%	
Hourly rated	135(963)	165(698)	120(440)	1(8)
Per cent	14%	24%	27%	13%
Supervisory	17(136)	14(116)	7(39)	—
Per cent	13%	12%	18%	

*The figures in brackets are the total examined in each category. The figure preceding the bracket is the number with hypertension in each group.

TABLE III. TYPES OF EKG ABNORMALITY

	New Employes	Hourly Rated	Super-visory	Total
LVH	9	98	13	120
RVH	1	4	—	5
LV damage	20	84	14	128
Infarcts: Ant.	3	19	4	26
Post	5	22	7	34
RBBB	9	35	4	48
LBBB	2	6	1	9
Arrhythmias	5	23	—	28
Total				398

TABLE IV. ABNORMAL EKG'S

Age	40-49	50-59	60-69	70-79	Total
New employes	36(1452)	11(149)	2(5)	—	49(2109)
Per cent	2.5%	7%	40%	—	2%
Hourly rated	68(963)	110(698)	94(440)	1(8)	272(1606)
Per cent	7.8%	16%	21%	—	17%
Supervisory	13(136)	12(116)	14(39)	—	39(291)
Per cent	9.5%	10%	36%	—	13%
Total	117(2551)	133(963)	110(484)	1(8)	360(4006)
Per cent	4.5%	13.8%	23%		9%

TABLE V. PRIOR KNOWLEDGE OF HEART DISEASE (IN THOSE WITH ABNORMAL EKG)

	New	Hourly Rated	Supervision	Total
Yes	2	112	20	134
No	47	160	19	227

pectoris may prolong their lives by awareness of the need to avoid the extreme exertion which would produce their pain. The remainder in this group were asymptomatic, and had no other abnormal findings. These may be examples of preclinical coronary artery disease. These and all others with abnormal electrocardiogram findings were advised to visit their personal physician for further study and treatment. They were especially urged to seek medical care when obesity or hypertension were found in the hope that the onset of disability could be prevented or postponed by prompt treatment.

A total of sixty typical myocardial infarcts were found. All but a few were known to have had a coronary attack. Two were not known to the patient and are examples of silent myocardial infarction. One was in a patient who, several years before examination, had been off work for only three days due to a "chest cold," and had no medical attention then. He was asymptomatic following this episode. The remainder were in men applying for work. Their uniform history of lack of any chest pain was not accepted, since their natural fear of being denied employment on this basis is easy to understand.

Right bundle branch block (RBBB) was a frequent abnormal finding, and was seen in many asymptomatic men in their forties. This finding was interpreted as being significant only if some other evidence of heart disease was also found. In the absence of other cardiovascular abnormality, these men were informed that they had an unusual electrical conduction pathway, but were not classified as having heart disease. Left bundle branch block (LBBB) occurred more infrequently. This was considered as a definitely abnormal finding.

Arrhythmias were not unusual. Only significant arrhythmias such as heart block and auricular fibrillation were tabulated. Extra systoles were so frequently found that no record was kept of their incidence.

The age incidence of electrocardiographic abnormality is shown in Table IV. These increased with the years. All groups were afflicted.

Table V is self-explanatory. Almost twice as many of those with an abnormality of the electrocardiogram did not know of any defect as compared with those who knew that they had a cardiac disorder. For all normals a base line was made available for comparison, when and if clinical heart disease should become suspect at a future time. After age forty the electrocardiogram is an important part of the periodic health appraisal.

Tricks Against Old Age

By Paul deKruif
Holland, Michigan

IT'S an honor for me, an old layman from the sand dunes on the shore of Lake Michigan, to be asked to say a few words to you general practitioners. For me, you are the prototypes of a new man of medicine, who will help all of us in all our troubles, our sickness, our sins and our sorrow.

My personal sorrow is that of being one of the fifteen million geriatric problems bothering you doctors. Geriatric specialists have given me expert counsel: on how to keep the soup stains off my vest; on how to act my age (sixty-five); on how to live with an occluded coronary or a stroke (knock wood) if either should hit me. On how to live, like the old crock I am, and like it. But I don't like it.

What I want is to keep a bit of the old bounce, the old swoosh, the old moxie that for many years gave me a feeling of indestructibility. Yet for many years I've felt the fire burning lower. What has your wonderful medical science to give me? To push back my deterioration?

To look for tricks against old age has been my hobby for more than twenty-five years; the results of that search are my story. Of course there are optimistic physicians who believe there's more for me to do than act my age and like it. Dr. Ward Crampton, of New York, says there's such a phenomenon as de-aging. "Our chief enemy is not old age," he says. "It is damage, largely avoidable."

The trouble alas is that I have been too stupid to keep away from damage. But Dr. Crampton cheers me up. "These damages are largely correctable," he says. That's good, because, in my time, I've been damaged and have damaged myself, plenty.

Especially past fifty-five I've suffered afflictions, annoying or partly disabling, and one or two of them potentially dangerous to life. For example: breakdown of the bones of both feet with resulting tendinitis and arthritis of my knees so I could just shuffle along; fatty infiltration and early cirrhosis of my liver; labile hypertension and looming danger of fixed high blood pressure and its possible cardiovascular consequences; auricular flutter with varying A-V block and enlargement of my heart; and last winter, severe impetiginized herpes zoster of all branches of the fifth cranial nerve, with evidence of encephalitis.

When this last one hit me—at the same time as a bad bursitis with a partially frozen shoulder—I really felt like Job.

These personal disasters were a blow to my arrogance. For many years before these deteriorations overwhelmed me I'd gone on a theory. It was to the effect that a high protein diet, high vitamin and male hormone supplements, together with walking and running on the beach in the sun and the rain and swimming in Lake Michigan's rough surf—that this regimen might retard old age. To hell with doctors and their periodic medical examinations. Activity, vitamins, sun and surf were medicines enough.

So they'd seemed, till the crackup. So they weren't. So I was wrong.

When my liver went bad in the late 1940's, the presenting symptom was a deep fatigue that made me feel I was walking against a gale of wind. That, plus marked jaundice, resulted in my wife Rhea and my friend Dr. Ralph D. Shaner getting me at last to a physician, the late Dr. Henry A. Rafsky of New York. He saved my life.

That great and gentle doctor—God rest his soul—walked into the room a few days after his first examination and laid before me the devastating figures of my liver function tests, among them an ominously reversed albumin/globulin ratio. "Do you want to go on living?" he asked me. I was in those days a heavy steady drinker—Dr. Rafsky cut me down to a miserable three jiggers of Scotch a day. He prescribed three shots a week of crude liver, big ones, and a higher than my already high protein diet, and higher than the already high vitamin supplements I'd been taking for years.

Soon my fatigue began to fade. Then my friend Boris Burns came to Dr. Rafsky's assistance, sug-

gesting heavy supplements of choline, methionine, inositol and B_{12}, all of them in capsules of Methischol. To help hurry the excess fat out of my liver. Soon I felt a further surge of energy.

Shotgun therapy? Yes. But I was a human guinea pig stricken with a deep and stubborn illness. In a few months all my liver function tests and even the sinister reversed albumin/globulin ratio had gone back to normal and my enlarged liver had faded back under my ribs. On the beach I began walking fast again and even jogging, as in road work, but barefoot. This broke my feet down structurally, and then my knees stiffened, with knifing pains. For many months getting out of bed, mornings, was an agonizing ceremony. Walking any distance at all was only a memory.

A brilliant rheumatologist prescribed orthopedic shoes. No go. A distinguished orthopedist recommended Kenny treatments. Effect—strictly temporary. And the amounts of anti-inflammatory steroid hormone needed to keep down the agony in my knees might soon have turned me into an edematous, moon-faced manic with diabetes and broken bones.

Then a general practitioner, Dr. Helen Crocker of Briarcliff Manor, said to me, "I know a man who'll be able to help you; I don't mean cure you." So George Anthony Schroeter, doctor of podiatry, of Briarcliff and Brooklyn, a bone-setting genius, bloodlessly rebuilt my broken feet and sustained them with special appliances. It was a wonderful, slow miracle. He chased inflammation out of my feet and knees by daily hot whirlpool baths, taken with a portable whirlpool machine of his own invention; this I used daily, religiously, at home.

In the summer of 1952, experts had told me I'd done my walking. Within six months Dr. Schroeter had me walking a couple of miles daily. *Now* it's the old fun to walk four to six miles, which we do every day. There was a bit of the Providential in Dr. Schroeter's cure of my knees and feet.

Last year, when Dr. Paul Dudley White, of Boston, began to digitalize me to control an intermittent ominously rapid pulse—atrial flutter and varying A-V block—and when he reviewed my deplorable past history of excessive alcohol, tobacco and rich food, he gave one part of my old anti-age theory a pat on the back.

"Your past habit of exercise, I think, has saved your life and may continue to do so if you are sensible about it," said Dr. White, master mender of the human heart. Dr. Schroeter has enabled me to follow that prescription of vigorous living.

Right here we encounter mystery. Dr. Schroeter had rebuilt my feet. Dr. Rafsky had fixed my liver. Dr. Mark B. Coventry of the Mayo Clinic had quickly unfrozen my bad shoulder with a single injection of local hydro-cortisone. Dr. Marion B. Sulzberger had rapidly overwhelmed the pus and pain of my impetiginized herpes zoster—with the triple local antibiotic, Neosporin, and massive intramuscular B_{12}. They were all gratified, they all seemed a bit surprised, at the speed of reversal of my deteriorations. Even Dr. White, for all his New Englandish reserve, seemed pleased at how quickly my enlarged heart returned within normal limits.

Why this uniform and rapid repair of damages? The skill of my various doctors, yes. And I thank them all, from the bottom of my heart. To me it was still mysterious. My long continued high vitamin, hormone, outdoor exercise regimen hadn't prevented these deteriorations. *But might they have given my aging body a chemical background to speed up repair?*

How had my regimen begun? Back in 1940, Dr. Tom Douglas Spies had explained to me that disease is chemical and may be chemically reversible. Over the years he'd shown me how folks can die of niacin deficiency without a sign of pellagra; of ascorbic acid lack without signs of scurvy; of thiamine deficiency without signs of beri-beri, and so on. His work had proved that this chemical starvation is always multiple and that it's important to consider in all disease treatment. He had demonstrated beyond doubt that a hidden vitamin hunger can develop even in bankers eating seemingly well-balanced three square meals a day.

So here was my unorthodox regimen: each time Tom Spies reported therapeutic activity of a given additional vitamin, I'd get tablets of it or multi-vitamin capsules containing it. Clinically I wasn't suffering these deficiencies. But I'd prevent them! My battery of pills and capsules grew in size, potency, number and multicolored gaiety. Famed vitamin hunter Dr. Casimir Funk, in his laboratory at U. S. Vitamin Corporation, had developed the theory that vitamins act together with minerals.

I began religiously taking his pioneering vita-

min-mineral preparation, Vi-Syneral. Not maintenance. Therapeutic, terrific, and meant for sick people. I've taken it daily, 365 days a year.

My zeal was greeted with roars of medical laughter. "You're the pharmaceutical industry's dream," said Dr. Wilbur Malcolm, of Lederle, supplying me aureomycin that might prevent or abort bacterial respiratory infections.

Only Dr. Herman N. Bundesen encouraged me. His vitamin, mineral, amino acid regimen was more complete than mine, and he got me started on daily male hormone, methyl testosterone. For this I thank him, seventy-three-year-old tornado of well-directed energy that he is. The anabolic effect of testosterone taken faithfully for fifteen years may well have helped my aging muscles, including the left ventricle of my aging heart. And boosted my bounce and moxie. I thank Elmer Bobst of Warner-Lambert for supplying me with my first male hormone.

Now again, and finally, we meet a mystery. For many years I was grossly overweight with a labile hypertension and a tendency to blow my top. On this, my regimen had had no effect whatever. Then in 1954, Dr. Robert W. Wilkins, chief of the hypertension service at Massachusetts Memorial Hospitals, Boston, told me of a beneficent side-effect of Rauwolfia—he'd introduced that drug to the medical profession of our country.

This side-effect was tranquility.

Dr. Frederick Yonkman, of Ciba, supplied me with Rauwolfia's pure alkaloid, reserpine, trade-name, Serpasil. This, in a very low dose—0.1 milligram once a day—joined my ridiculed jumble of tablets and capsules. First result: slowly, a mild drop in blood pressure to within, or close to, normo-tensive range. Second effect: relaxation. Wilkin's patients had described it to him as a don't-give-a-damn feeling. Over months, came what amounted to a character change for me: no more blowing of gaskets, even under provocation. And finally—was it coincidental?—a gradual but more and more marked drop in my old voracious appetite.

Marked drop in between-meals raiding of the icebox. No more second helpings. Then smaller helpings. So, over some sixteen months a weight loss of 45 pounds. No so-called will-power involved. *No attempt to diet!*

But after many months, despite the very small daily reserpine intake, came another side-effect. Not so good. Lethargy. And a trace of gloom, never before experienced. It vanished when reserpine was withdrawn. Then, slowly, back came tension, worry and with it, the big hunger.

Then came help, and if it weren't pharmacologic, it seems for me as if God has had a hand in it; anyway, I thank Him for it. He worked through Dr. John T. Ferguson, at Traverse City State Hospital in northern Michigan. Fergy calls himself a general practitioner interested in mental troubles. For him, reserpine—as in many other institutions—brilliantly tranquilized hundreds of over-active, agitated, mentally disturbed patients. But then too many of them were sent into the dumps of depression by the Indian medicine.

Dr. Ferguson tried to counteract these depressions with various analeptics, caffeine, the amphetamines, et cetera. No go. Then last year Fritz Yonkman of Ciba sent him a strange chemical. Phenyl-(alpha-piperidyl)-acetic acid methyl ester. For short—methyl-phenidyl-acetate. It is an awakener, a booster of mental and physical energy. Ferguson found this new analeptic remarkably counteracted reserpine depressions without halting its tranquilizing action. In a wide dose-range methyl-phenidyl-acetate has no bad side-effects, reports Ferguson after giving it to over 1000 patients over a year. This has been confirmed by five independent investigators.

Wasn't this something to add to my personal bag of tricks against my inevitable advancing senility? I asked Ferguson whether he thought reserpine had had anything to do with my weight loss. "From our experience," he answered, "excess eating is one expression of inner tension or anxiety. Resolving these chemically leads to less eating and adjustment of weight towards normal."

I've added methyl-phenidyl-acetate — trade name, Ritalin—to my small daily dose of reserpine. No lethargy now. No big hunger. But serenity remains. And a curious by-product: It's fun to face my typewriter at seven in the morning, and words come easier than they've done in years; there's a new bounce in my step on long walks on the beach, and it's good, as in the old days of long ago, to hit the cold surf in this month of October. And there's new enterprise. My mentor, Charles F. Kettering—Boss Kettering—says that hostility to new ideas, in formerly

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Developments in Communicable Disease Control

By F. H. Top, M.D., F.A.C.P.
Iowa City, Iowa

IT is trite to say that the common communicable diseases have faded in importance from the standpoint of incidence, disability and death. It is certainly true for the latter two categories and partially true for the first. The marked changes which have occurred in communicable diseases have been operative since 1900, but principally in the last three decades, and they came about because of no single set of circumstances. One calls to mind isolation and quarantine regulations, environmental sanitation and immunization as factors of some importance, particularly the latter two. The "Personal Hygiene Movement" dating around 1910 was a likely pertinent force, and more recent students of the problem would immediately mention chemotherapeutic and antibiotic agents. More adequate housing and a better nutritional state, particularly in children, cannot be omitted from consideration as contributing factors. Additionally, the marked improvement in medical education, the increased acceleration in medical research, and an eager willingness on the part of professional workers (medical and allied professions) to utilize new discoveries have left no small imprint on lessened occurrence, decreased severity, and death resulting from communicable diseases.

Past Basis for Control

At the turn of the century, the basis for isolation and quarantine regulations were set rather definitely as the etiological agent of each disease was discovered, and severe restrictive measures were assiduously carried out, especially during the first three decades of this century. Somewhat less rigorous application had already crept into communicable disease control practice by the time the sulfonamides and antibiotics appeared, and their advent merely hastened the change for the limitations, and inherent deficiencies of restrictive measures became apparent gradually.

From the start, it was apparent that isolation of the patient and quarantine of contacts or premises constituted great interference with personal and family liberty. It often meant a serious loss of earning power or considerable loss of time from school; however, at the time, restriction seemed less hazardous than no restriction. The true import of healthy carriers as prime reservoirs of infection both in epidemic and inter-epidemic periods had not been discovered, and recognition of the difficulty of healthy carrier detection was unknown. All of this added up to the fact that isolation and quarantine as a means of reducing the occurrence of cases had great limitations. The importance of the family group as a unit in the study of communicable diseases led to information which indicated that infection entering the family unit, whether in the guise of apparent or inapparent infection, soon affected the other members of the group and that by the time the first case was recognized clinically, sick and well were likely infectious. There were other limitations to restrictive measures. Many cases were mild, while others went unrecognized either by ignorance or intent, which meant that health departments were seldom notified of all diagnosed cases and could have no information on the undiagnosed illnesses.

Present Basis for Control

The availability of antigens for inoculation against certain infectious diseases and success in rendering large numbers of individuals immune to attack has decreased the number of susceptibles to a disease like diphtheria under an adequate program of prevention to a small proportion of the population making restrictive measures less necessary. For any given disease like diphtheria or smallpox, however, the price of a large measure of freedom from it is dependent upon vigilance in carrying out primary inoculations and booster injections. Unfortunately, an early marked reduction in deaths and a later diminution in number and severity of cases of a disease tended to lull the public and some physicians alike to the necessity for not only continuing but exerting greater efforts at maintaining a high level of immunes in the population. Low incidence of disease demands more frequent artificial (primary and booster dose) stimulation by injection of antigens because natural (first and subsequent infection)

stimulation is less commonly encountered during periods when infectious disease occurrence is low. Small outbreaks of diphtheria are increasingly being reported in communities where immunization programs have been neglected.

For many bacterial infections, the patient, for all practical purposes, is rendered relatively noninfectious to others within twenty-four hours by adequate doses of the sulfonamides or antibiotics. The new therapeutic agents are not specific for viruses, as in the instance of measles, rubella, chickenpox and mumps, but are effective in holding in check secondary invaders when used in weaklings (children with heart disease, nephritis, malnutrition or some debilitating condition) and to modify secondary infections and complications in normal children who may contract the diseases.

Quarantine is now used infrequently except for a disease like smallpox, and although isolation is advocated for the common diseases of childhood the emphasis is on the benefit which accrues to the patient in decreasing contact with secondary invaders, which may lead to complications of a serious nature, rather than restriction to protect others, many of whom, as older children and adults, are immune.

Hospital and Home Isolation

When the common communicable diseases were more prevalent and occurring in epidemic form, the isolation hospital, variously called "pest house, fever hospital, communicable disease hospital," was common to the larger cities; or an isolation unit was frequently noted as a separate part of a general hospital in smaller cities. Early in the present century it was thought that the common communicable diseases could be better controlled by isolating as many cases as possible in such hospitals or units. During epidemic times this was not possible, and for certain infections the general mildness of the disease made it difficult to accomplish. Severely ill patients were undoubtedly better cared for in hospitals than if they were left in the home, but the high fatality rates incident to hospitalization of the critically ill created a fear of sending patients to hospitals, and they were often admitted under duress. Wards were the order of the day, and for a disease like scarlet fever, now known to result from infection with many strains of hemolytic streptococci, complications were more likely to develop, because as a rule they were caused by a strain of organism other than the one causing the disease and the new strain was readily picked up from other patients in the ward, particularly from children.

Today, hospitalization is infrequently necessary because the attack is mild or because sanitary facilities and better housing facilities makes isolation in the home more feasible. Available therapeutic agents for many of the infections further adds to the decreased need of isolation hospital facilities. In 1948 the average occupancy rate of isolation hospitals was 43.6 per cent. Long before this date some isolation hospitals began converting their empty beds to use by caring for patients with tuberculosis or those with chronic illnesses and by domiciliary care for the aged.

Special facilities and institution of proper techniques made it possible to eliminate some communicable disease hospitals and to establish instead small isolation units in general hospitals or by adequate planning to establish or convert to two-patient rooms incorporating appointments which allowed such rooms to be used as separate small isolation units. We must admit with Anderson[1] that the communicable disease hospital, or as he calls it "the fever hospital," like any other specialist hospital, exists mainly as a place in which expert medical and nursing attention may be given to severe forms of acute infectious disease and only to a small extent as an isolation unit for unusual epidemics.

A Continuing Problem

In a recent timely article, Bauer[2] directs attention to the present importance of communicable disease problems. With recession in incidence, severity, and death has come the inevitable "laissez-faire" attitude which so often follows on marked advances in control or treatment of infections. Many lay people and some physicians feel that the control of tuberculosis is no longer a problem, and their attitude toward smallpox and diphtheria is similar. Probably you have heard a colleague remark, "The new drugs have licked tuberculosis and in ten years it will be a rarity." Well, unfortunately, communicable disease control isn't that easy. When a disease is brought under control it must be kept there and it is exceedingly doubtful from the biological point of view that species of organisms pathogenic for man will be annihilated.

Here are a few facts which Bauer[2] cites as evi-

dence that communicable disease remains a serious problem in the United States:

1. Of every ten deaths that occur, one is caused by a communicable disease; for those under age thirty-five the ratio is 4 to 1, and over thirty-five years, 12 to 1.

2. About one and one-half million cases of notifiable communicable diseases are reported annually in the United States; to these must be added the generally non-reported illnesses such as upper respiratory infections, diarrhea and gastro-enteritis.

3. Infectious diseases as a whole account for the majority of absences among the working population and among school children; in the armed forces they are the main cause of absence from duty.

4. An estimate of the cost in care and time away from work is difficult but it must be in the billions, for the sales of antibiotics alone amount to approximately a billion dollars annually.

A Biological Phenomenon

An infectious disease is a biological phenomenon. In Hippocrates's time the environment was stressed as most important in causation of disease, and the "humours of the body" also were emphasized. For many decades following the golden era of bacteriology the most important component of infection was considered to be the etiological agent of a given disease, the parasite. In recent years Gordon[3] and others have emphasized the concept of multiple causation—host, parasite and environment—in deciding the pattern of infectious disease incidence. The study of the close inter-relationships of all living things to each other is called "ecology" and the relationship of man with all living things is called "human ecology." The study of host-parasite relationships then in an ecological setting has brought into focus all three components of infection, namely, the host, the parasite and the environment. In relationship to the environment, there are physical, economic and social forces, which play a role in causation of disease. All of these have caused a change in our attitude toward communicable diseases and their control.

In the light of the biological consideration of disease, recent concepts regarding spread of infectious diseases must be discussed. The first relates to knowledge concerning the importance of cross infection. For a time air-borne infection was not seriously considered, but in recent decades and during World War II it was adequately demonstrated that many infections are spread by droplets, which, when extruded from the nose and throat as by coughing, laughing or sneezing, are expelled into the air. Rapid drying takes place, some particles falling to the ground while others remain suspended and are air-borne, to be later impinged on ceilings or walls while others fall upon bed clothes and the horizontal surfaces of furniture or floors. The facts gained from this work fortified the impressions gained from clinical observation and made it desirable to isolate patients with a disease like scarlet fever in smaller units (one or two bed units) rather than in large wards, where there was more chance of one patient contaminating another through interchange of organisms. It was soon discovered that complications were often the result of infection by a strain of organism other than that which caused the patient's first admission to the hospital due to contact with some other patient in the ward. Commonly, otitis media developed in this manner, and at the present time such an occurrence would be considered an indication of poor management or poor housekeeping.

A second important change, which has influenced the management of infectious diseases, has been chemotherapy. The use of sulfonamides and antibiotics has had a marked effect against bacterial diseases, with a few virus infections also amenable. These agents have become exceedingly important in the treatment of acute infectious diseases. In comparison with former years, to be without them would be unthinkable, but the marked enthusiasm for them following their discovery has altered somewhat, when we consider the secondary effects which they may induce, such as host hypersensitivity to the drug, change of intestinal flora with drugs of the tetracycline group, and resistance of organisms to certain of the antibiotics. In this connection, DDT and similar insecticides for the control of arthopods must be included, for they, too, have posed serious problems.

Summary

As Bauer[2] clearly indicates, the problem of communicable diseases and their control is still with us. As physicians our duty is clear; we must

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Recent Observations in Medicine and Health in India, Pakistan and Kashmir

By Nur M. Malik, B.D., M.D., A.I.C.S.
Detroit, Michigan

THE American-piloted Sau'di Arabia plane carrying Moslem pilgrims from Mecca and Medina sailed over sleeping Karachi and landed gently on the well-kept port of the city, the capital of Pakistan. Smartly uniformed Pakistani officers were on duty at the airport. A public health official came aboard and vigorously and efficiently sprayed the belly of the plane with an odoriferous disinfectant. The thick white cloud burned the tired eyes and parched throats of the weary pilgrims, causing them to cough and choke. Some complained and cursed into their beards but accepted the precaution as a final trial of the hajj and crept down the gangway, easing stiff limbs to action as we were all herded into a dimly lighted shed and given various landing forms to fill out. The port officers—health, police, customs and others—were extremely courteous to me, and I finished my papers quickly; but then I was approached timidly, first by one then another of my fellow passengers, for help in completing their forms, until I had a considerable gathering of these illiterate hajjis about me. I could not refuse their gentle insistence and it took some time to finish the task because they were often reticent about giving the names of their female relatives, they did not know their birth dates, and they spoke in accents that were difficult for me to understand after my long absence from my homeland. Their sincere gratitude rewarded me for my trouble as did the appreciative little smiles of the port officials. Preliminaries over, I was finally released to meet my host, a young man who had spent a couple of years getting "practical training" in mechanical engineering in Detroit after taking his degree from Massachusetts Institute of Technology. Dawn was breaking when we reached his home in Nazimabad, some six miles outside the city, a new and fast-growing suburb which boasted a good water supply system but no other public facilities.

Since the achievement of freedom some eight years ago, many of my countrymen from India, Pakistan and Kashmir have visited us in Detroit, and during my three-month visit in those countries I was fêted in their homes in cities, towns and villages. This close contact permitted me to discuss and to evaluate the various aspects of the development I observed. This was my first visit to the land of my birth since her freedom from the British, and I was privileged to see, in my three months of travel there, many of the changes and much of the progress these countries had vainly striven for under the British regime.

One of the aspects of change which most encouraged me was to be found in the field of medical education and the closely allied field of public health. I had been a product, originally, of the old system of medical education which had produced a compartmented hierachy of medical practitioners ranging from the Licentiates of Medical Practice (L.M.P.), in the Indian Army known as Indian Subordinate Medical Department (ISMD), through the Bachelor of Medicine, Bachelor of Surgery (M.B.B.S.) and, even, by special dispensation granted to some rare personages, the Doctor of Medicine (M.D.). There was also, at one period of development, the degree of Licensed Medical Service (L.M.S.), possessors of which were known as Assistant Surgeons (the L.M.P.'s were called Sub-Assistant Surgeons). The ISMD was changed after World War I to IMD (Indian Medical Department), making the Indian practitioner akin to the "heaven-born" IMS, the well-paid Indian Medical Service—real "Brahmin" compartment of the hierarchy—reserved for Englishmen themselves or their European subjects. Sir William Osler, at one time in his earlier years, had considered "going out to India" with the IMS.

During the years in Detroit, a number of

Presented in part before Naval Reserve Medical Company 9-5, October 4, 1954, by invitation from Captain O. A. Brines, M.D.

Dr. Malik is a graduate of the University of Michigan Medical School; B.S. (in medicine) 1926, M.D. 1927, and is an Associate of the International College of Surgeons.

Indian and Pakistani physicians have visited in my home; many of them are professors in medical colleges and when I visited them I was able to see at close vantage a few of the institutions of learning, as well as hospitals and nursing training establishments.

The medical schools and colleges which have granted the degrees noted above, have existed side by side for years, in some instances on the same campuses; the "school" has been the inferior set-up and it is being gradually supplanted by the medical "colleges"—or being improved to meet the higher standards, which are not noticeably inferior to those in the western world. The colleges confer the M.B.B.S. degree after seven years of study; two premedical and five medical. Graduates are granted the M.D. degree upon submitting an original research paper and passing a comprehensive examination, work for which usually requires an additional two years after the seven. Neither the M.B.B.S. nor M.D. degrees are registerable in the United States, although the graduates are being accepted in increasing numbers by our hospitals, for postgraduate studies and residencies.

I shall attempt to offer in the following pages some facts about health and medicine in three countries: Pakistan, India and Kashmir—countries which until comparatively recently comprised one dependent nation within the British Empire. If, occasionally, I refer to the peoples of these countries as Indians, it is that my mind constantly thinks of them as one—despite the factors of division which have come about since they have achieved freedom; one might as accurately refer to a Madrassi or Bengali as to a Kashmiri or a West Punjabi—all are Indians and no setting up of new boundaries can really establish new cultures overnight, though given time and impetus, new cultures will probably become more apparent.

Pakistan

India became free on August 15, 1947. Pakistan, "land of the pure," was declared a separate Moslem State one day before that. This partition caused great loss of life and property to both countries and in addition precipitated an unprecedented influx of millions of destitute refugees into both countries. The health and general welfare of these uprooted millions presented many difficulties, and the shortage of equipment and lack of trained personnel augmented the gravity of the situation. As a result, even six years later, the problems of the refugees were receiving administrative attention; things move slowly at best in all countries except the United States. In India and Pakistan, things were not at best before separation, and yet six years had seen unprecedented changes for the better—even for the displaced millions.



Student nurses, Delhi College of Nursing, India. Front and back views. (Photos by Mrs. Ruth McEvoy, Detroit, Michigan)

A visitor soon comes to know of the Government's efforts to do all in its power. Quite early, under its impetus, the social uplift program was started, and plans for the opening of new medical colleges and health centers went forward along with the program of improvement of those already in existence—plans drawn up by all the states and provinces forming Pakistan.

Under this program, additional accommodations and equipment will be provided for such institutions as the Jinnah Central Hospital, the Civil Hospital and the Lady Dufferin Hospital in Karachi. New Out-Patient Departments are planned for the first two of these hospitals and arrangements are underway for new lecture

rooms, deep x-ray therapy machines and for a separate post-mortem building.

The plan aims at expansions and improvements of medical and health facilities for maternity and child welfare, by opening new centers. There will be an increase in the number of tuberculosis clinics and sanatoria; at the Leper Hospital, Manghepir, it is proposed to provide additional accommodations for leprosy patients.

The first All-Pakistan Health Conference was called at Lahore in December, 1947, "to consider the problems arising out of partition and to devise ways and means of improving medical facilities in the country." The conference recommended starting new medical and health institutions to replace those which were now in India. It stressed the need for accelerated training for doctors, nurses, compounders and technicians— to meet the acute shortage existing in the country. These recommendations have been implemented as much as the financial resources of a new country with many other problems could permit.

Four years later, 1951, the Second Health Conference was convened at Dacca, East Pakistan, "to review the progress made in medicine and public health since the First Conference." This was attended by the Ministers of Health of the Provinces, aided by their Advisers. The Conference approved a six-year plan for further development of the health measures. Pakistan will have, at the end of that time, 160 hospitals of 200 beds each, 500 hospitals of thirty beds each, 2000 dispensaries in the rural areas, four Tuberculosis Sanatoria of 200 beds each and one new hospital of 500 beds for the city of Karachi. The plan covered the opening of a new medical college in West Pakistan; institutes for medical research, hygiene, and preventive medicine for nutritional research; a laboratory for testing drugs and a plant for the manufacture of medicines. A separate factory for penicillin manufacture will also be built under this plan.

Serious efforts are being continued to insure that the standards of medical education remain as high as that of any first-class institution. There will be a general improvement of the existing medical colleges and schools, and of the already functioning hospitals. The staff of the Dow Medical College, in Karachi, has been increased. A plan for the provision of additional equipment and for the building of new hostels for men and women students, separately, was drawn up and is now being rapidly implemented. Classes were started at the

TABLE I. MEDICAL COLLEGES IN PAKISTAN

City or Town	Name of College	Number of Students
Dacca	Dacca Medical School	100
Hyderabad, Sind	Liaquat Medical College	42
Karachi	Dow Medical College	130
Lahore	King Edward Medical College	120
	Fatima Jinnah Medical College (for women)	75
Multan	Nishter Medical College	75

college for training in pharmacy. The schools at Dacca, Karachi and Lahore continue their work in training nurses. For postgraduate medical training within the country, a proposal to establish an All-Pakistan Postgraduate Medical Institute has been considered. To make up any deficiency in their education, the medical personnel is being sent abroad for higher studies; many of their number have returned and are now serving the country; among them a few have been trained in Detroit's hospitals and Michigan's Medical Schools.

To educate the general public in the principles of health and hygiene, the Health Education Bureau was established in August, 1952. A Public Health Bill for the country was drafted, with the object of devising effective means of preventing the outbreaks and spread of infectious diseases. The bill is now under consideration and will be presented to the Pakistan Legislature. A program for the examination and treatment of school children of Karachi has already been approved and is being rapidly implemented, to be administered by the office of the Chief Commissioner of that city.

Extensive BCG vaccination work is being carried out all over the country with the assistance of the World Health Organization. Under the technical assistance program, arrangements have been made to secure fellowships and scholarships for training abroad, as well as for equipment for the medical and public health institutions in Pakistan, from WHO, UNICEF, the Technical Cooperation Administration and the Colombo Plan authorities. Programs for the expansion of the BCG work and for setting up a DDT plant have been approved by the UNICEF. With the help of the WHO, a social hygiene and skin center has been opened in Karachi.

The Government had early felt the need for developing coordinating medical research, but was unable to initiate action for want of funds. Last year, however, a sum of 50,000 rupees was sanctioned, and the Pakistan Medical Association was authorized to coordinate the research activities

TABLE II. HOSPITALS IN PAKISTAN

State or Province	Number of Hospitals
Bahawalpur	38
Baluchistan	41
Dir	1
East Pakistan	788
Kalat	17
Karachi	26
Khairpur	22
Kharan	1
Lasbela	3
Makran	4
North West Frontier and Agencies	184
Sind	120
Swat	3
West Punjab	622

in the various medical and health institutions and to disseminate the information. To estimate the scope of such a project, it might be well to take a count of these institutions already functioning in Pakistan.

The medical colleges are six, as listed in the accompanying table.

Besides those named, a new medical college has been sanctioned to be opened under the social uplift program at Chittagong, East Pakistan. It will cost about 4,190,000 rupees and will have a 500-bed hospital attached to it. The hospital will later be expanded to a 1,000-bed capacity.

In addition to the colleges, there are six medical schools for the training of the licentiates. Of these, five are located in East Pakistan—at Bogra, Mymensingh, Rajshahi and Sylhet—and one at Quetta, Baluchistan. The number of students in these schools varies from 75 to 120 and the course of study is of four years' duration (following successful matriculation from high school).

There are 1,870 hospitals in Pakistan, large and small; well-equipped, moderately so, and some poorly. The accompanying table will give some idea of the distribution of these hospitals.

These institutions have a variety of sponsorships, from the comparatively numerous government owned and administered, such as the Jinnah Central Hospital in Karachi; to those, also numerous, administered by various mission groups such as the Adventists, the Presbyterians and the Catholics; down to the community owned, the nursing group owned and the privately owned establishments—all of varying degrees of efficiency and all fulfilling the need of their communities to the best of their knowledge with the equipment at hand.

The Jinnah Central Hospital at Karachi was acquired by the Pakistan Government from the British Royal Air Force in 1948; it was to have been reserved for the use of government servants but was subsequently opened to the general public. It is a large modern institution and is being rapidly staffed with well-trained foreign returned younger men of the profession. The day I visited



(Above) Madras Government Tuberculosis Sanatorium, an open air unit for twenty patients.

(Below) Madras Government Tpberculosis Sanatorium; convalescent hut for two patients. Dr. Major K. N. Rao, I.M.S., seen in the picture, is the surgeon-superintendent. (Photos by Miss Suzanne Copeland, Detroit, Michigan.)

there, one of the surgeons told me of an operation performed that morning on a female patient with advanced carcinoma of the upper end of the esophagus, and of other cases of similar seriousness. His manner was straightforward and matter-of-fact, and I was impressed that Pakistan's surgeons will make their place in the world.

I had a more than casual contact with one hospital in Karachi; a few days after my arrival there I became ill from what is commonly termed "tropical tummy," a gastro-intestinal disturbance probably caused by a number of things, all new to the western digestive system. From previous experience, I knew how serious such conditions can become; therefore, I consulted with my friends and decided to enter the clean, modern Seventh Day Adventist Hospital for a week-end. I spent four or five days there and became well acquainted with the institution; its small but devoted staff of

American doctors and nurses is doing, with remarkable efficiency, a very difficult and sacrificial work. Their surgeon was away on leave in the States while I was there, and they honored me by asking my opinion about a few of the more complicated cases. My popularity had a disturbing effect: I began to be consulted, too, by the male nurses and some of the orderlies for help "to buy an American degree" like mine. My sincere and patient explanations in answer to their requests, failed to convince them; they did not believe that in America degrees are not being sold, though I related to them how many years of toil and study I had undergone in that distant land, and told them of the adverse conditions of language, food, religion, climate, and color discrimination—a struggle to keep body and soul together, to strive, survive, and to succeed . . . a little. I received the attention my intestinal tract required and was given additional advice by the hospital staff concerning the various threats to health that must be kept in mind during my visit in the country. As a result, I had no further ill health in the succeeding three months.

At the American Embassy office at Karachi, I was advised to visit the Holy Family Hospital, an old institution which was close by. A Sister was attending to a group of women patients when we walked in. They quickly covered their faces to guard themselves against the unwelcome eyes of strange men. I realized at once that they were purdah Moslem ladies, and experienced a twinge of some indefinable pain at their automatic action: a mixture of regret that I had infringed on their privacy and of remorse that they felt the need for that privacy. Before they had noted my presence I had had a quick glance at their faces and was aware that they were expectantly content, adoringly appreciative of the Sister in charge. Because of the prevailing system of purdah in Pakistan, all female patients in these hospitals are treated by lady doctors and the Sisters, whose garb is reminiscent of the veil, are highly favored by the women of the country. Holy Family Hospital is well equipped and efficiently administered, and maintains a typically gentle and considerate, intelligent staff. A new hospital which was in process of being built was soon to replace the old. There was another under construction at Delhi, which I saw several weeks later, and still another of the same community is serving at Rawalpindi in the Punjab.

It will be noted in the above chart of statistics listing the Pakistan hospitals, that no mention is made of bed space. Such information is available, of course; but it is really not to be accepted as gospel, particularly concerning the more isolated areas. It might be well to think of the Indian bed as the type Jesus mentions in one of his miracles when he tells the stricken man to pick up his bed and walk. The Indian travels with his bed and bedding, and when he arrives at his destination he is at home. Many a village dispensary compound is occupied by the sick in times of pestilence; and their nursing also presents but a small problem, for they bring part of their family along and are tended for their personal needs by their relatives, under the doctor's surveillance.

India

From Karachi to Ahmedabad, India, is but a short flight. The graceful Dakotas, of India Air Lines, droned over the peaceful farm lands which, from above, looked exactly like an American countryside. Among the passengers was a rich Marwari gentleman with his wife and six children. The parents reclined in their seats, not needing to worry about the problems of their young ones, for the oldest, a girl of about fourteen, nursed them efficiently as, one by one, they turned pale and green and suffered various degrees of airsickness. I was fascinated by the young "mother"; she was weighted down by her father's wealth—gold, silver and precious stones! As I envisioned the lucky boy who might marry her and how secure he would be, a forest of chimneys, lazily emitting whiffs of smoke, appeared on the far horizon: Ahmedabad, city of Gandhi's original Ashram or retreat and also India's chief textile producing center. As the plane spread her wings over the ancient town and sailed over the mill stacks, the panorama it provided was one of peace and prosperity.

Ahmedabad contains more than eighty textile mills and produces the major part of India's cotton goods. The mill owners are families of culture—educated, travelled and refined. They vie with one another in philanthropy. All of them have hospitals for the welfare of their employes. I visited some of the larger ones and found them all well organized, but over-crowded. I was surprised to be introduced to a "Vaid," a practitioner of the indigenous system of medicine, one of the

regular members of the hospital staff. "He is a clever diagnostician," the chief surgeon told me, sensing my reaction. "The patients have the right to choose their own doctors."

The progessive Ahmedabad is building Gujrat University. New buildings for the various colleges and for hostels are rising. I listened to a scholarly dissertation on nuclear physics by the head of the Physics Department, and visited other colleges. The small garden of medicinal herbs connected with the College of Pharmacy appealed to me; it is still in its infancy but with good care should become a successful project.

Mahatma Gandhi's ashram or retreat is near the town on the bank of the Sabarmati River—he is often referred to as the "Saint of Sabarmati." It is a peaceful and nearly self-sufficient colony; its members lead a monasterial life, serving in various capacities the community that has grown up about the ashram. It was from this center that Gandhi began his famous salt march to the sea, there to "make" salt in defiance of the unjust and injurious English law which prohibited the manufacture of salt by the Indian people and taxed them when they purchased legal salt; the equivalent of the American Boston "tea party." Two "brothers" conducted us (I was accompanied by various friends who had visited me on several occasions in Detroit, among them the mayor of the city who had spent a day with me at Detroit's city hall, meeting our mayor and councilmen and investigating Detroit's sewage disposal plant, among other things; he is, of course, a mill owner and a member of one of India's outstanding families) around the ashram, explaining and answering questions. They pointed out, reverently, the first hut on the premises, which had been built by Gandhi himself. His office room is kept just as he left it, including the little desk, cushion and writing articles. They were in the process of compiling all his writings in book form and were collecting material for it. I mentioned a letter he had written me many years ago, and they asked for a copy of it. They are continuing his work among the untouchables and are bringing up a group of untouchable girls, educating them and training them in handicrafts to which they are suited; taken into the ashram when quite young, they will be kept until their marriages are arranged. Of course, this is but one of the activities and responsibilities of the followers. Somehow, there is no incongruity in the two aspects of the city; the spirit of Gandhi is also the spirit of the mill-owners, and the proximity of the modern mills to the Gandhi ashram provides a spiritual balance that inspires.

I believe my friends in Admedabad outdid



Bombay Children's Orthopedic Hospital. (Society for Rehabilitation of Crippled Children of Bombay, India.)

The Doctors Dholakia, in white clothes, are the surgeons—both of whom have had their training abroad. Dr. (Mrs.) Saroj Munim Dholkia did her postgraduate work in the United States; her husband is a Fellow of the Royal College of Surgeons, an orthopedic surgeon. (Photos by Miss Suzanne Copeland, Detroit, Michigan.)

themselves in entertainment for me. I stayed there some ten days and could have remained another twenty without making the rounds of the families we know there. Typical of the festivities is an evening I spent at my friend Shautam's home some 6 miles from town on the left bank of the river. He asked all the guests, about twenty-five or thirty men and women, to dinner but insisted that we come at six o'clock so as to enjoy the sunset on the broad river (dinner in India is usually at eight). As we stood on the roof-garden of his luxurious marble home and watched the beautiful display of color and the tropical scene reflected on the waters of the languid Sabamati, the evening sky filled with flocks of parrots, darting by like green arrows; peacocks shrilled, wild monkeys

chattered and jackals called. It was an earthly paradise. To crown the evening's beauty and charm, someone turned a light-switch and the surrounding trees, bearing colored lanterns, transformed the gardens into a magic fairyland. Food, music, conversation and general good cheer rounded out the evening.

Shautam has built a hospital for his workers; the building was complete and was being furnished. It was to be ready for patients in a few months. There is also another new hospital in the town—still incomplete when I was there—a Government project that will be connected to Gujrat University Medical College. The town is health-conscious and is making strides in disease prevention, especially among the families of the mill workers.

The journey from Ahmedabad to Bombay, about 300 miles to the south, is made in an air-conditioned train, overnight. Bombay is without doubt the first city in the land. Suffice it to say, it has good doctors, nurses, hospitals, nursing homes, research institutes and medical colleges par excellence. Bombay's leading surgeons and physicians have been my guests in Detroit and naturally I took advantage of their kindness when I went to Bombay. I was shown through hospitals and colleges and was very impressed. A walk through the wards of the KEM Hospital or the Tata Institute for Cancer is profitable and inspiring. Recently, a small hospital for polio victims had come into being. This was organized by the mother of a little child who had been afflicted with the dread disease and could find no place in India for modern treatment. Her work has inspired a noble following, and has government recognition.

It is in New Dehli, the Capital of India, that we pause to survey briefly the health and medical conditions of the country. Prior to partition in August, 1947, not much progress was made in these fields. Conditions reached their worst after partition because of the influx of displaced persons from Punjab. In 1946, before partition, there were in the country 5,882 hospitals with 58,410 beds. The accompanying table listing the birth, death and infant mortality rates in Registration Areas of India, provides another graphic picture of conditions and of the general upward trend after partition, despite the more acute conditions. By 1951, the number of hospitals in the country were increased to 8,601 with 113,557 beds.

TABLE III. MORTALITY STATISTICS IN INDIA

Year	Birth rate per 1,000 of population	Death rate for 1,000 of population	Infant Mortality per 1,000 live births	Population in Registration Areas in 1,000's
1947	26.6	19.7	146	240,511
1948	25.5	17.2	130	242,728

Of course, the medical facilities for the whole country are insufficient, as will be seen from the following tabulation which gives the proportion of medical personnel to population:

1 Doctor per	6,300
1 Nurse per	43,000
1 Health Visitor per	400,000
1 Midwife per	60,000
1 Dentist per	3,000,000
1 Pharmacist per	4,000,000 (and to 3 doctors)

The greater proportion of India's population lives in rural areas. It is there that the lack of health and medical services is felt most acutely. This is partly due to the fact that 75 per cent of the doctors are located in the cities and towns. Because of this situation, since partition, the graduating doctors are urged to settle in the outlying village areas, at least for the first few years of their careers. As in other countries, this plan does not appeal to the younger men. Talking with them one learns that it is unreasonable to expect such a sacrifice from them when they have invested so much time and money, and often have to support large families and meet other obligations in life. The need, therefore, is both to increase the existing facilities for medical education and to offer greater incentive to young graduates to induce them to go out into the rural areas.

"It is a tragedy," pointed out Dr. Kóvadkar in his address at the Medical Licentiate's Conference at Poona last year, "that while on the one hand the country is suffering from the dearth of medical men, there is the unfortunate fact that the paucity of colleges, the high cost of education, and the longer course of study keeps away a large number of aspiring youths from entering the profession."

To remedy the situation, the Indian Medical Council has suggested that "all existing colleges should, at least, introduce the two-shift system at

once, in order to double the output. At present, the thirty medical colleges in the country are able to yield only about 1,600 graduates each year, which is far too meager a number." Speaking before the Uttar Pradesh Medical Conference at Gorakhpur, Dr. Carole advocated: "Stipends should be given to the deserving students, on the understanding that when they pass out they will work in rural areas for at least three years."

It is felt that the cost of medical education is too high and that a number of students who are fully qualified and anxious to enter cannot afford it. A system of stipends on the proposed lines will be a well-deserved incentive to needy students and will provide a continuous flow of physicians for the villages. The Health Minister, Rajkumari Amritkaur, in her speech at Ahmedabad, deplored the fact that the medical colleges were understaffed and referred to "the deterioration in the standard of training in the institutions."

It is well to look for a moment at the distribution of India's Colleges which turn out medical and health personnel.

TABLE IV. DISTRIBUTION OF COLLEGES IN INDIA

States	Medicine	Dentistry	Pharmacy	Nursing
Assam	1			
Bihar	2			
Bombay	6	2	1	0
Delhi	1*			1
East Punjab	2**			
Hyderabad. Deccan	1			
Madhya Bharat	3			
Madhya Pradesh	1			
Madras	5			
Mysore	2			
Orissa	1			
Uttar Pradesh	2			
West Bengal	7	1		2
	34	3	1	3

*For women only.
**Including one for women students.

This is certainly not an imposing total when one considers the population of the country. As a result of the scarcity of practitioners with modern scientific training, the old systems of medicine still prevail. The two most common are the indigenous systems called the Vaids or the ancient Ayur-vedic of the Hindu, and the Unani or the Greek. The practitioners of these arts of treating ailments are called the Vaida and the Hakim. There are, also, homeopaths; and I met a certain "German doctor" of uncertain background who was doing well in a large town of northern India.

One of the main reasons advanced by many in favor of the indigenous systems, is that God in His infinite wisdom has so planned the universe that He has created specific remedies for the particular diseases of a region. "Notice the Beechoo bouti, the scorpion plant," they point out. "Providence makes its antidote grow close by." When one is stung by the nettle, he rubs the juice from the leaf and is relieved of the burning and itching. This argument, of course, does not follow a universal truth. The real causes are complex and deep and will not be eradicated without time and education, which both work miracles. Recommendations are under way for standardization and closer government regulation; meantime, it is being urged that the real value of all such systems be determined by a Central Research Institute, and that teaching colleges should train the followers of these methods of cure. After this is done, it is felt that all forms of healing will merge into one. At the present time, there are about fifty colleges in India where instruction is being imparted in the indigenous systems of medicine. They are distributed as shown in Table V.

TABLE V. DISTRIBUTION OF COLLEGES GIVING INSTRUCTIONS IN INDIGENOUS SYSTEMS OF MEDICINE

States	Colleges	Hospitals
Ajmer	1	
Assam	2	
Bihar	2	
Bombay	8	6
Delhi	1	1
Hyderabad	2	
Madhya Bharat	2	
Madras	6	1
Mysore	2	
Orissa	1	
Ragasthan	2	1
Travancore-Cochin	2	1
Uttar Pradesh	14	6
West Bengal	5	2
Total	50	18

The account of my hurried visit to the world-renowned Taj Mahal at Agra must wait; suffice it to say, I visited it first by light of a full moon and that it surpasses description. The lady of the Taj, Mumtaz Mahal, wife of the mogul Emperor

Shab Jehan, died in childbirth, giving birth to her fourteenth child. One wonders what the complications were and wishes the good empress had lived in these days of scientific progress.



The Taj Mahal, Agra, India. The lady of the world-renowned Taj Mahal was Empress Mumtaz Mahal, wife of the Mogul Emperor Shah Jehan, its builder, who died in childbirth, delivering her fourteenth child. The author is mirrored in a marble pool before the famous mausoleum.

While seeing the magnificent ruins at nearby Fatehpur Sekri, some 30 miles from Agra, I was intrigued to discover that these royal moguls of some 500 years ago had quite modern bathroom facilities, a fact that is rarely mentioned, but is, I think, important—since it prepares one for the general Indian attitude toward personal cleanliness even today.

Agra has a medical college which has been upgraded from the old training school for Licentiates. The town was host to the annual meeting of the Association of Surgeons of India, of which I am a member, in the last week of December, 1953. I was scheduled to read a paper to that assemblage, but due to my earlier return had to leave it with the Secretary of the Association, to be read *in absentia*.

It had been sixteen years since I visited my immediate family in Punjab, and after returning to Delhi from Agra, I flew to Lahore, traveled by bus to Jaranwala and finished the last sixteen miles in a private taxi—all in one day—to the village of my birth, Sayadwala, in Shiekhupura District. I feel that the longest and the best one mile, even after completing the flying trip around the world, was the last "sweet sixteenth" to Sayadwala.

The sun was turning into a yellow molten ball of fire, on its return trip to America, when I set my feet again on the sacred soil of my ancestors and of my childhood scenes. The news of my arrival spread with astonishing rapidity. The first to reach me were two little girls who must have been keeping watch outside the village. While the driver and his assistant removed the dust of the road from me with a cloth, villagers rolled out like the flood waters of the monsoons. The next few days were passed as in a dream. There were garlands of flowers, parades, dramatic productions, songs of welcome and joy chanted by the village maidens, fireworks, teas and dinners.

More important was the number of patients that came from far and near to be examined by the American doctor. There were the usual medical and surgical diseases: thyroids, pelvic tumors, fractures, hernias, hydroceles—all comparatively easy to diagnose. I made use of the local dispensary which was sadly neglected and, due to the shortage of doctors, run by a young compounder. A fine looking boy of thirteen had a cylindrical soft tissue mass on the external surface of his left arm; a man with a massive strangulated right inguinal hernia was carried in on his bed from a neighboring village; a woman was brought in suffering from an enormous ovarian cyst; a poor old lady had a Colle's fracture of her left hand which was swollen, blue and covered with blebs. (The "bone-setter" had used four split pieces of bamboo stick the length of a lead pencil and incorporated them as splints in a tightly wound greasy rag; after I had reset and re-splinted it properly, the patient was so comfortable that she sat beside my bed all night fanning me so I could sleep free from the heat and mosquitoes!)

The weather was hot and there was too much to do; I began to feel tired. "Why not go to Kashmir?" asked Kapila, a lovely young lady who had studied at the University of Michigan and is now teaching in one of Delhi's colleges. "It will be a real vacation within a vacation. My uncle and aunt there will look after you."

Kashmir

The poets of ages past have described this land of forest-clad mountains, crystal clear, icy springs

and sparkling, tumbling torrents, as "an emerald set in pearls." When the Himalayas were first thrust up from the earth's crust, they enclosed a lake about 60 miles long and 40 miles wide. After long ages the waters cut their way through the encircling limestone hills and partially drained the huge body of water, forming the five rivers of Punjab (five water). The sixty by forty mile area encompasses the incomparable "vale of Kashmir"—abode of the gods and of man. Gulshan, the Kashmiri guide, confided to me on the way to Kheelan Merg, "Jenab (God) has given us two gifts more than to the rest of the world—the cool, clear air and the pure medicinal water. Without these, our race would long ago have perished from the face of the earth." After seeing this beautiful valley which is ringed the year around with an almost unbroken girdle of snow-capped mountains clothed with giant whispering pines, at whose feet gurgle icy springs, crystal brooks and placid lakes ornamented with water lilies and garlanded with an unbelievable profusion of flowers, my sensitive and incurably poetic soul feels that it can anticipate an image of paradise by remembering Kashmir.

The small plane from New Delhi with a handsome turbaned Sikh pilot, accompanied by a Hindu and a Moslem co-pilot, flies to Amritsar, to Jammu, and passing over the Pir Panjal Range of the Himalayas, lands on the delightful little airport of Srinagar, Capital of Kashmir. The temperature drops to 40 degrees with the landing of the plane. Shri Jai Dev, my host, had asked his son to meet me upon my arrival. After the brief customs formalities, in which they asked specifically "Do you have any liquor, tobacco or a gun?" we were on our way to his residence.

We drove on a narrow cement road, doubly lined with tall young poplar trees which were now bare except for a green top fringe of leaves that gave them the appearance of stalwart green-turbaned sentinels. We passed between small farms where men plowed and children tended the sheep and cattle. The small farms, small animals and small children, all gave the countryside an aura of enchantment.

The lady of the house, Kapila's aunt, welcomed us at the door and led us to the charming little garden before the house where breakfast was served in the Kashmiri manner. Later in the day, we went to the Chasma-i-Shahi, or Royal Springs, for a picnic tea. It was a new experience for me to find that the Moslem servants of my Hindu host would prepare the tea for the family but would not partake of it themselves. In India, it is just the opposite, for the Hindus are in the majority in India and consider other groups "untouchables"; here in Kashmir, the Moslems are in the majority and assume the superior position. Lateef, one of the Moslem cooks for the family, marvelled that I, a Moslem and a Hajji (having been to Mecca), could eat with the Hindus. The dietary laws have thus lost their original significance of cleanliness and retained only the fetish of segregation which has perhaps gained undue impetus with the modern emphasis on communal groups.

The Chashma Shahi is a terraced garden on the side of the mountain. It is watered by a gurgling spring that issues from the body of the hill. The great mogul rulers of India, and especially the Emperor Jehangir and his famous wife Nur Jehan (light of the world), had had several such gardens done alike: Naseem Bagh, Nishat and Shalimar are still showplaces, as is Chashma Shahi. They are brilliant with flowers all through the summer and even now in late fall were a riot of color; the leaves were turning on the famed Chinar trees, the magnolias, oaks and umbrella trees. It was more beautiful than I had ever dreamed it would be.

The Chinar tree is government protected and may not be cut; it is larger than our maple and its leaves are almost like those of the maple, though they are heavier and more durable. These leaves are carefully gathered by the poor people and saved for winter burning in their Kangris, the earthen bowl they carry under their clothing next to their bodies, to keep them warm. The prolonged and repeated thermal and, possibly, chemical irritation of the skin, leads to the Kangri cancer well-known to the medical profession. The people carry the Kangri so unobtrusively under their loose garments that one hardly notices it. I asked Khatou, a Kashmiri girl member of the household of my host, if she had a Kangri; "Jenab, yes, your Presence," she answered and pulled it out from under her voluminous clothes as if by magic!

The Director of Health Services of Kashmir is that grand old man of the Indian medical profession, Colonel Sir R. N. Chopra. I met him at the exclusive and quite fashionable Hari Singh Club and later was invited by him to speak before

the Medical Society of Srinagar, at a meeting held in the Veterinary College; and the combined group overflowed the hall. Decorated shamyanas, or tent tops, were erected on the grounds outside for the surplus. A few members of the United Nations and WHO teams on duty in Kashmir also attended the meeting. The venerable colonel presided and introduced me to the assemblage as a "distinguished visitor, a brilliant American surgeon and a very rich one."

One of the veterinary doctors who preceded me reported the occurrence of a widespread panic in a distant mountain area, occasioned by the fear of rabies caused by consuming the meat of sheep killed by a "mad wolf." Investigation showed it to be a case of mass hysteria: no one had died. Indeed, actually no one had become ill. The speaker stated that the disease could not be contracted by eating such animals "but it has been reported," he said, "to have been transmitted to the young in the uterus by a rabid mother, in rare cases."

There is no medical college in Kashmir at the present time. Students are sent to attend colleges in India. One of the doctors had just returned from a postgraduate course of study in England and was very enthusiastic about his experience abroad. Another had traveled in Russia quite extensively, and propounded the good he had seen there to anyone willing to listen.

I was invited to a Kashmiri dinner and a visit to a small hospital, privately owned, and operated by the truly heroic and saintly couple who acted as my hosts for a day. They were toiling under great difficulties, having the barest necessities in the way of equipment but serving the needy unstintedly, justifying the poor services of the institution by saying philosophically that it is far better than the conditions these people have in their homes. And, of course, they were right. I anticipate that their hospital will in time grow to more modern proportions. The story of the couple reads like an epic of Indian antiquity. The doctor, I learned from friends, had had the misfortune to lose his whole family when his house had burned down during his absence from home a few years ago. His wife, three lovely children, his servants and even his two dogs were burned. The sudden shock of the tragedy made him almost lose his mind. For some time he entertained the idea of migrating to some other part of the world, far, far away from the scene of his sorrow or, better still, to renounce the living, retreat to the waiting arms of the giant Himalayas like some of his Brahmin ancestors, and pass the rest of his earthly existence in communion with God.

Then he met a young girl graduate of the Lady Harding Medical College in New Delhi. She, with that love which mother Eve has passed on to her kind in all climes, was able to convince him: "It is simple to be a saint in the secluded hill and deep peaceful forest, but it takes much more saintliness to be a man among men." It was better to serve humanity in the name of the lost family than to waste the precious years of life in seclusion and inactivity: "God has enough angels to glorify His name, night and day. He does not need man to praise Him. Man does better praise by serving his fellowmen." They worked together for a time and in time they were married. They founded the small hospital which is dedicated to the first wife, whose name adorns its portals and proclaims in noble tones the life of service and sacrifice for a woman by a sister woman.

Against the mild objections of my friends, who warned me of the discomforts of the journey, I returned from the lovely vale of Kashmir by car over the mountain roads to the city of Jammu. I had enjoyed crossing Switzerland a few weeks before and did not want to miss the beauty of the mountains by flying over them. The road to Jammu is the same one used by the old Mogul rulers when they traveled to and from Kashmir in the hot Indian weather. Today, it takes from twelve to fifteen hours, with a few brief stops for tea and meals. The car climbs to some 24,000 feet, to the summit of the pass. The winding, ascending and descending road leads through scenes of breath-taking beauty among the lofty, wooded, majestic mountains, with their deep gorges and sparkling streams. One meets shepherds watching their flocks far away from crowded civilization, or notices some seemingly lost hamlet clinging to the slope of a high mountain where some man is plowing a small acre or a barefoot maiden is seen gracefully carrying jars of water up a ribbon-like footpath to her simple thatched mud hut. I shall never forget those hours!

Returning to Delhi by plane from Jammu, I spent another few weeks there seeing friends and meeting various leaders of the nation. I had luncheon with Pandit Jawaharlal Nehru, the Prime

Minister of India, at his official residence; had a long talk with Babu Rajendra Prasad, President of India, at the old vice-regal lodge where he resides; called on the Vice President, Sir Sivapelli Radhakrishnan who has seen us in Detroit—one of the greatest living philosophers; and had an interview with Maulana Abul Kalam Azad, Minister of Education, a man of ripe judgment and great literary accomplishment—a man I have long wished to meet. These were days that were rich in experiences for me, a poor village boy whom fortune had favored. One of the memorable events was a dinner at the home of Dr. Sushila Nayyar, Health Minister of Delhi, who had spent several days with us in Detroit a few years ago. She had been private physician to Mahatma Gandhi, living in the ashram for some years before his assassination. I had looked forward to meeting her again and was not disappointed. She detailed to me the health problems of the area and the methods being used to meet them. Through her, I met the Director General of Health Services of India, Colonel Lakshman, a tall and impressive appearing gentleman who belongs to the progressive Christian community of South India, known for its producing efficient and capable leaders.

The time was running low. Before my departure, Dr. Tulsi Ram, my pious, unassuming and gracious host, arranged for me to meet the Delhi Medical Association. The meeting was well attended, and imagine my surprise to find that the presiding officer for the occasion was Dr. P. N. Kapur, Chief Medical Officer of the Eastern Indian Railways—another of our Detroit visitors. I saw numerous friends in the audience and felt quite at home. One notable difference was that there were quite a few women doctors present, more than in our American medical meetings; this is due to the fact that, generally speaking, Indian women prefer to be treated by women doctors. I was to address this meeting; these doctors had come out to hear what I had to say.

This was a real responsibility. Traveling throughout the country, one cannot escape the feeling of criticism which the Indian feels toward America and things American. Is it due to jealousy or to the lack of proper understanding and interpretation of these "things American"? Possibly both. Because of this, it was my constant effort, whenever I was asked to speak, to bring to my audience the true America as I have known it for the past thirty-four years. To the medical groups, I briefly outlined the basic requirements and standards of American medical education, beginning at the beginning and making the necessary comparison. I told of high school, premedical and medical studies, of internship, residencies, boards and fellowships leading to registration and hospital appointments. I spoke of the hardships and documented my words with not only my own personal experiences but those of my American classfellows: somehow the rest of the world, and especially the Indian, has the mistaken idea that all Americans are born with the silver spoon and in special favor of the gods. I told of the hanging up of the shingle and the wait for patients and success, the average incomes and the tremendous spirit of unity and sacrifice among the nobles of the profession in America—and of the need for combined efforts in India. I told of the health conditions in America—not in the present tense at first but in the past—and of the methods that had been used in order to achieve what exists here now; I told also of the American hinterlands where perfection is not yet achieved and where the struggle is to be compared with that in other countries; and I explained carefully that American movies do not at all present, nor mean to present, American life.

Then, I proceeded to talk of American life, of the common everyday variety of American man the doctor meets in his office. I spoke of his good points: straightforwardness, reliability, punctuality, industriousness, family-mindedness and community-consciousness. I spoke, too, of his simplicity and sensitivity, his roughness and crudeness as attributes and manly virtues—and I spoke of his superstitions and phobias. In short, I presented Americans as people, not unlike Indians—but pointed to the spots in which each might aspire to higher levels.

On this occasion in Delhi, when I closed my remarks, the doctors rose to their feet and applauded long and enthusiastically. They gathered around me afterwards and were extravagant in their expressions of appreciation. One of the women doctors, who seemed to be a European, came through the crowd to meet me, introducing herself as Dr. Birch. I had heard of her all over the country: principal of the well-known Lady Harding Medical College for Women, in New Delhi. she is from Chicago. I told her I was sorry I had not known she was there—perhaps

I might not have been so outspoken about Americans.

"I'm glad you did not know," she answered. "It would have been a great loss if you had changed anything you said." And she invited me to the college the following day. She is a fine person and a capable one.



(Above) Main Building, Lady Harding Medical College and Hospital for Women, New Delhi, India. (Photo by Dr. Tulsi Ram.)
(Left, below) The marble statue of Lady Harding, the founder and patron saint of Lady Harding Medical College and Hospital for Women, New Delhi, India. (Photo by Dr. (Miss) Vimla Chowdhary.)
(Right, below) Two lovely medical students on the steps of the marble statue of Lady Harding. (Photo by Dr. (Miss) Vimla Chowdhary.)

The college is located on vast grounds and has many buildings, some of which were then under construction. With its attached hospital, it is managed entirely by women doctors, for female patients only. The story of its founding is intriguing. Lord Harding, when he was Viceroy, was once riding a caparisoned state elephant, after the fashion of the mogul rulers, through the streets of Delhi. Suddenly, someone threw a bomb from a window along the route. It exploded in the howdah, killing the mahout. The Viceroy was injured slightly, but Lady Harding escaped unhurt. In the days that followed, the Vicereine received many sincere messages of sympathy and prayer from the people, especially from the Indian women, for her husband's complete and speedy recovery. Many of the letters contained gifts of money "to defray the expenses" of the Viceroy's injury. It is said that Lady Harding conceived the idea to use the money as a starter for a medical college just for the education of women, and that she approached the then rajas and maharajas of the country asking them to contribute funds for this purpose. They responded with their proverbial munificence; the college was built and will endure to perpetuate the memory of a noble woman. Her marble statue stands between the main building and the student hostel. There she sits, an embodiment of grace, refinement and aristocracy, a patron saint to the lovely young ladies of an alien race. And when the charming girl students walk by her in their white coats, carrying stethoscopes, she appears to be watching them with a bored sort of indulgence intermingled with pride and affection.

The students for Lady Harding College are taken from all over India, about thirty-five every year. To qualify, a student must have passed in First Division, the F.Sc. (faculty of science) examination or have a B.Sc. degree. Only four or five candidates are accepted from each state—just the top few. The course of study lasts five years and leads to the M.B., B.S. degree. Students must live in the hostels or dormitories provided on the grounds, in order to give undivided attention to their work.

I met Dr. Birch the next day on the verandah leading to her office. As we entered through the arched doorways, a uniformed and barefoot servant appeared from nowhere and placed fresh flowers on her desk. Another tiptoed in with her morning mail on an exquisitely carved silver tray, and then another slipped in and announced coffee. I made mental comparisons, instinctively, thinking of her in a Chicago office or even thinking of a dean's or college president's office in Chicago, Detroit or Ann Arbor. She must have understood my thoughts for she is a keenly intelligent woman; she smiled enigmatically. Coffee in the office of her Indian Assistant, and the extensive tour of the college, took two hours.

In one place, walking across the grounds, I noticed tall grass that needed attention. When I remarked at the untidiness, she explained that the

grass is allowed to grow and is then auctioned to grass-cutters who gather it and sell it in the city market to people for their cattle. It brings in about 100 rupees or so annually, and the grass is saved, not wasted. Dr. Birch added that this is a general practice since the country has become independent, that the saving of the grass for animal consumption goes along with the program of added acreage for agriculture.

I was drawn to inspect a new and well-kept college chapel. It was used not only by the Christian students but also by others, for worship and prayer. A little further on, near her official residence, we saw a modern and adequate swimming pool. It had been the scene of a tragedy a few years before when one of the students had drowned in it. The sorrow still seemed to haunt the surroundings as we walked along, our voices dropped to low tones. Throwing off the mood in a moment, Dr. Birch told of a complication she had had to settle concerning her living arrangements. The official residence or kothi, meant for her as head of the college, was far too large for her alone. As there was a shortage of housing, she gave it to two of her professors with their families, and herself moved into the smaller one next door. Her official family was displeased at her for what they considered a loss of prestige; the head of the college must reside in the big bungalow. No amount of explanation could make them see her point. The matter reached the American Embassy and there it rested, no longer bothering her.

In the far corner of the grounds, I spied a ruin and asked about it. "It is some sort of temple," she thought, "there are temples everywhere here, you know . . ." It looked more like the architecture of a Moslem mosque than a Hindu temple, and I felt impelled to have a look at it. As we walked toward it, passing a nameless grave that stood nearby, the doctor confessed that she had been curious about it but had been warned not to venture near it because it was said to be infested with snakes and jackals. We picked our way across the pile of rubbish at its entrance, and I found that it was a neglected mosque, "in tears for want of worshippers"; its courtyard was littered with debris and choked with tall weeds. Written across its brow in caligraphic Arabic script was the Kalima or Moslem creed: "God is One and Muhammad is His prophet." Beneath this was the injunction: "No one may enter this holy place except in bare feet." There was a faint stir inside and on investigation we found that a family of Chamars, the lowest of the untouchables, had set up housekeeping there. The doctor was touched by my concern and voluntarily said that the mosque would be cleaned up and made available for the Moslem students in attendance.

As I was leaving the college, I asked her if she liked it here in India working among an alien people. She agreed that she did, but not with much enthusiasm. When I asked if she found the students or patients any different from those she would have met in the States, she answered that largely she thought that students are the same everywhere.

"But the patients, almost all of them, seem very undernourished, chronically harboring some disease or other and chronically anemic. The majority of them have such very low blood counts: hemoglobin is frequently as low as 10 per cent! And relatives here are quite troublesome. Everyone crowds around the patient to prove they love her but no one really makes much effort to help her. The reason I was late this morning was that I was waylaid by the father of a little boy who is suffering from a fatal type of blood dyscrasia. I have talked to the father three or four times already making it clear that there is no cure for the disease. We are keeping the child alive by repeated transfusions. The father knows the situation, yet he is always lurking in some corner: 'Just a few minutes of your valuable time' he pleads. And we go over the same ground again and again—for two or three hours at a time. When I ask for blood donors, they all vanish like frightened rabbits, except for the poor old mother. She is a pathetic old lady and very anemic herself."

Suddenly her eyes sparkled: "Oh there is my favorite old man. I just love him. He is such a dear . . . see him?" Her face shone with the regard a person of position feels toward simple unspoiled nature. An old man, an outcast, the lowest on the rung of her official family, who had grown old with this great center of medical education, came hugging the corridor wall, looking furtively at the great lady chief. As he shuffled past us, he salaamed obediently, touching his gnarled hands to his furrowed and turbaned forehead. She acknowledged his greeting with a palpably warm response. The old man glowed from the attention and slowly disappeared down the hall.

"He is a darling old man. At his hut he is always taking care of some sick or starved animal—last week he had a lost mongrel puppy he was nursing." Just a woman's fancy, I mused; a fortunate old man, he, to have the great foreign

American doctor take fond notice of him. And I thought of the millions, more worthy perhaps, who could appreciate her approbation. She semeed to read my mind again, for she said, "They are wonderful people, these Indians. All of them." There was a tenderness in her voice such as one has when speaking of those one loves but does not feel he belongs to—an objective love, if such a feeling can be. "Last time I was home I spoke often to my friends of how good the Indians are."

"But what of the appalling poverty and the human misery; the dirt, the diseases, the unnecessary deaths?" my American friends ask when I speak reminiscently of home.

Yes, yes. It is all there and much more. But we must look ahead, must realize that these new countries are changing from their old ways with remarkable speed, and must remember that even in America some new ideas did not take hold easily; had to be instrumented by governmental action. These countries now can control their destinies as never before in this modern era. We must encourage understanding and must try to understand. Besides, my heart and mind are so full of the good and fine things I have seen and experienced, that I cannot find room to dwell on the bad—though I am not unaware of it, just as I am not unaware of it here in my adopted land.

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COMMUNICABLE DISEASE CONTROL

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attempt to prevent disease and, when it is not preventable, to treat it successfully. However, prevention or treatment is interference with a biological relationship, that between a parasite and its host operative for all infections. Interference with this relationship cannot be undertaken lightly. Organisms pathogenic for man, whether they be bacteria or viruses, are ubiquitous and for the most part will likely be with us interminably. For certain diseases like diphtheria, maximal control is readily attained and in the instance of failure early recognition and prompt treatment leads to a desirable end. In many instances, however, the host-parasite relationship is exceedingly complicated and interference is not without its penalty. As Anderson[1] states, "The parasites will tend, in time, to find a method of circumventing our form of interference. The newest antibiotics placed in our hands are the means of making profound changes in the microbiology of man. Let us see that we use them with thoughtfulness."

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Pharmaceutical Manufacturer and Physician

Partners in Progress

By Theodore G. Klumpp, M.D.
New York, New York

THE WELL-KNOWN painting entitled "The Doctor" depicts a physician beside the bed of a child. A dignified, professorial gentleman of the old school, he sits with chin in hand anxiously peering at the child waiting for the crisis to pass. The pose is typical of the times—there was little else he could do but sit and wait. It was his misfortune to have been born just before the beginning of the most fabulous period of all time, a period set apart from all the centuries that have gone before it by one overwhelming force—scientific research. All of a sudden, in the twentieth century, the idea of scientific research caught fire. To be sure there have been many truly great scientific investigators throughout the span of recorded history, but always before they were lonely voices crying in a vast wilderness of ignorance. In this era, as never before, large numbers of individuals have seen the vision of research and what it can do to make this a better world in which to live. For instance, more progress has been made in the conquest of disease and the prolongation of life than had been accomplished in the entire 999 centuries of man's previous existence on earth.

The most eloquent summation of what has been accomplished can be expressed in terms of life expectancy which has moved upward from forty-nine years in 1900 to almost sixty-eight in 1953. In 1900, among any average group of 1,000 persons, one could count on seventeen dying that year. Today only nine of that same number will depart this world. Among infants, the revolution is even more marked. At the turn of the century, of every 1,000 babies that survived birth, 162 died within the first year, whereas today less than thirty succumb. At the beginning of the 20th century, 7,000 children died every year of whooping cough. Last year only 310 died of this disease. Looking at it from another angle, we have seen the almost complete elimination of such killers as cholera, yellow fever, smallpox and the plague. Diptheria, scaret fever, typhoid fever, typhus, tetanus, rickets, Rocky Mountain spotted fever, pernicious anemia, Addison's disease, meningitis and other diseases have lost their deadly sting. Tuberculosis was responsible for 194 deaths per 100,000 population in 1900, but only 10.6 in 1954. In half a century, the greatest reaper of them all—pneumonia—has been all but defeated as witnessed by the fact that the death rate has declined from 152 per 100,000 to twelve. Even among the survivors, at the beginning of the century it took an average of three months' wages to pay the hospital bills resulting from a case of pneumonia. Today the disease is often cured at home at an average cost of only five hours' wages for the miracle drugs. Only forty years ago, one of every four persons subjected to a major operation met his doom, whereas today only one in a hundred succumbs, and if that still seems high, let us remember that surgeons can now operate where the risk is great, whereas a few years ago they would not have dared touch many patients that now have been given at least a fighting chance to live.

These spectacular gains have been achieved through the collaboration of the medical profession, pharmacy, and the pharmaceutical industry.

In no other field of endeavor has this kind of partnership been more productive of good for mankind. In all of history, it is one of the brightest chapters of industry and a profession working together to their mutual interest and for the common good. Fifty years ago, collaboration of this kind was impossible because our pharmaceutical industry had not matured enough to be worthy of it. Only twenty-five years ago, it would have been tantamount to professional suicide for any self-respecting physician or scientist to take a job with a drug house or even work with it in clinical investigations.

Today all that has changed. We both have a keen sense of our mutual dependence and a whole-

Presented at the Michigan Postgraduate Clinical Institute, Detroit, March 10, 1955.

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some reciprocal respect has gradually come to replace the distrust and misunderstanding that once existed. My appearance on this program is eloquent expression of the change that has taken place.

But our job has just begun. The gains above recited resulted largely from our accomplishments in one sector of the ugly panorama of diseases that afflict mankind. There are still bacteria that haven't been mastered, and it is likely that the appearance of new mutants will keep us busy in this field for a long time. Although the conquest of one of the meanest diseases of them all—poliomyelitis—now appears within sight, there is still a whole host of virus diseases that are as yet untouched. Cancer is still a murder mystery to which there is not a single basic clue. We have a good palliative for diabetes, but we still don't understand the basic pathogenesis of this disease. The death rate from it remains essentially unchanged. A whole host of endocrine, mental, and neurological disturbances still defy our best research brains. Arteriosclerosis, the greatest killer of them all and the ultimate limiting factor in our life span, is still beyond our grasp. There is no doubt that our scientists have plenty left to do, and so long as mother nature fails to create and maintain perfectly functioning bodies, she will need the combined research help of our physicians and the pharmaceutical industry. But the most significant and encouraging aspect of medicine today is the fact that at long last we have learned how to go about picking the lock of nature's hidden secrets.

Opening these doors is not a one-man job. In the future, more than has been the case in the past, new discoveries will emerge as the culmination of the combined efforts of many workers covering the scientific spectrum from physics and chemistry to clinical medicine. While the pharmaceutical industry is well equipped to handle many of the laboratory phases of the work, in the end it must all be turned over to clinicians at the bedside for the final and decisive steps.

I know that there have been questions in the minds of many physicians, clinical investigators, and the heads of their institutions as to what posture they should assume in collaborating with pharmaceutical houses. Having been on both sides of the fence, it is sometimes amusing for me to see how it varies. In general, the relationship is a frank, wholesome, friendly one, as between two partners that trust each other as dedicated men working together in a common cause. Sometimes our clinical counterpart can't quite bring himself to trust anyone from a commercial concern, and he deals at arm's length and holds his cards close to his chest. Once in a while we are received as a bishop might welcome some woman from a house of assignation. In some of our older and more conservative institutions, they try hard to be good fellows but with a sense of guilt as if they were slumming. But on the whole, there has been a progressive improvement in our relationship and understanding, and the change for the better has been noticeable even in the relatively short time that I have been a member of the pharmaceutical industry. It has grown as our industry has come of age and by our actions has increasingly earned the respect and confidence of practicing doctors.

Let us, for a moment, turn to another aspect of our relationship where our industry has not yet won the understanding of medicine.

Never before in the history of medicine have there been so many therapeutic agents placed at the disposal of the practicing physician. If the artist's conception of the old-time doctor was that of a dignified old gentleman in frock coat with his chin in his hand, the typical pose of the present-day doctor is something quite different. Today he might be pictured as a slightly distraught and perplexed man in white sitting at a desk piled high with drug brochures and beside him a wastebasket filled to overflowing with drug advertisements, most of which are in unopened envelopes.

All this may seem like an abomination to the doctor of today. Actually, what seems to be a torrential over-abundance—and I agree in some respects it is—is merely the outward manifestation of the greatest decade of industrial vigor and productivity this world has ever seen. For all of its woes, I would rather be deluged with more drugs than I knew how to use than to be forced to sit at the bedside with my chin in my hand because there are not enough drugs to save lives or at least bring comfort, ease, and relief of pain to my patients.

I would rather be a little bewildered in trying to choose an automobile from among 150 odd good models that are available than to be forced to buy a mediocre government-approved and

standardized Volks wagon. I would rather be stacked up over Detroit for two and a half hours in a 1955 stratocruiser than to have the sky all to myself in something like the Wright Brothers' original flying machine. On all sides, we have the same problem. Let's not complain because the goose lays so many golden eggs. For one thing, it will do no good to complain because nothing will stop the momentum of present-day industrial creativity except, and God forbid, another war or a depression. To bring about a better adjustment to the current situation, it is imperative that physicians exert every effort to learn more about the medicinal tools that are offered for their use. Only in this way will they be able to select and reject wisely and convert the crude ore of this golden age of invention to the fullest benefit of their patients. Perhaps even some of those circulars and brochures that are so quickly consigned to the wastebasket are worthy of a little more study towards this end. As time goes on, "The intense competition among pharmaceutical manufacturers makes it certain that ultimately only the superior products will be prescribed by physicians." This was said by a distinguished physician, Dr. Elmer Severinghaus, who is now a member of our industry.

So long as I have had anything to do with drugs, nomenclature has been a problem. This was as true when I was Secretary of the Council on Pharmacy and Chemistry as it is now. For a long time, it was not clear to me why drug houses chose such weird and sometimes fantastic names for their products, and why they didn't just give up and use generic names coined by the Council on Pharmacy and Chemistry, the U.S.P., or even the Food and Drug Administration. It wasn't until I was finally called upon to actually baptize a number of new drugs that certain facts of life became evident.

For the sake of this discussion, I am certain that I am safe in assuming that we don't want socialized medicine any more than we want to do away with our American system of free enterprise. If this is true, then I can assure you that the brand name or trademark is here to stay. If you will stop to think about it a moment, you will recognize that our entire system of free enterprise is in fact based on brand names. The two are inseparably interwoven. When a manufacturer places a new drug on the market, he wants to be quite certain that the physicians will recognize it and hopefully prescribe it. He therefore gives it a distinctive trade name, and he spends considerable sums of money making it known to you. This trade name is protected by law, and no one can legally simulate it. If the drug is a good one, and the manufacturer has done a good promotional job, you know about it and prescribe it. If it does what you expect of it, you continue to prescribe it. The manufacturer who may have spent hundreds of thousands, and sometimes millions of dollars in research developing it, and a few more hundreds of thousands of dollars making it known to you, gradually gets his investment back and sometimes after a year, sometimes longer, if he is lucky, he begins to make a profit, part of which goes back into research. But many drugs, even good ones from your standpoint, fail to make a profit. The successful ones, from our standpoint, pay for those too.

On the other hand, if a manufacturer puts out a non-patented new drug under a generic name, he is confronted with an entirely different situation. Almost immediately a whole array of drug houses, most of which contributed nothing to research or the task of making the drug known to you, market the same article under its generic name. Your prescription for the generic item is as likely to be filled with any one of the several secondary products as the original. The investment of the original manufacturer in the product is diluted to the point where he fails to get a reasonable return. If this occurs often enough, he will be unwilling, indeed he will be unable, to spend money on any research that leads to a drug that must carry a generic name.

You may ask why not market the drug with a generic name followed by the name of the manufacturer, such as Belladonna—Winthrop? There are good reasons why this doesn't do the trick. Surveys bearing on this point show that doctors more often than not fail to specify the company's name and even when they do, a large percentage of such specifications are lost when the pharmacist fills the prescription. Another important objection to this practice is the fact that while the active ingredient described by the generic name may be identical in the products of different manufacturers, other features of the product may differ. Among other things, there may be differences in solubility, rates of disintegration, flavoring, pH, preservatives, alcohol content, vehicles, and other characteristics that may influence the be-

havior and action of the article. In addition to this, patients are often disturbed when the characteristics of the preparation they have been used to are inexplicably changed in having a prescription refilled.

It may have occurred to you to ask why manufacturers don't use generic names for drugs that are patented. The answer to this is clear. In the first place, patents often take a long time to issue and we don't always know that there will be a patent when we name a new drug and place it on the market. Although five houses have been marketing the antibiotic "tetracycline" for some time, the patent is still in litigation. A competitor of ours had a new drug on the market for over two years before the patent issued to us. Besides all this, drug research is so intensive and so many concerns are concentrating on the same objectives that we are finding it increasingly difficult to predict who is going to hit the tape first in the race for patents. I have cited a few objections to show that generic names are no more suitable for patented drugs than others. There are additional equally important arguments but time does not permit me to dwell on this any longer.

When you look at the names that pharmaceutical manufacturers select for their preparations you have undoubtedly thought at one time or another, "How can they be so silly?" And some of them are downright impossible. But believe it or not, there is a reason for this too. When we wish to select a name for a new product, every executive of the company, from the president on down, is asked to suggest all the names he can think of that may be suitable. The chemists are similarly asked to propose names that bear a reasonable relationship to the chemical structure of the compound in accord with the well-established principles of chemical nomenclature. A list of possible names, often a hundred or more, is prepared in order of their acceptability. A search is then made of registered names in the U. S. patent office and other indices of trade names. Almost invariably, we find that our choice names are too close and similar to other names in use. Time and again we have gone through lists of a hunded or more suggested names without finding one that will pass muster. From here on, we begin getting into the ridiculous. We send out a call for additional suggestions and start juggling letters around trying to manufacture a name. Sometimes, but rarely, we are lucky and find a good name that will do. At other times, we adopt a name and have it in use for years, as was the case with our name "Pluravit," when someone writes in and tells us we are infringing his name and would we please discontinue it or he will sue us. In my experience with difficult problems, I have found the search for good names the most baffling, frustrating, and unrewarding part of my work. And I know the members of the Council on Pharmacy and Chemistry of the AMA, the United States Pharmacopoeia, and the Committee on Nomenclature of the World Health Organization feel the same way about it.

In closing, I would like briefly to refer to one overriding problem, the importance of which cannot be overemphasized. It is regrettably true that the public has a deeply ingrained impression that medical care and the drugs that are a part of it, cost too much. This, in my opinion, is the basis of the most serious threat to the practice of medicine as we now know it. It is a challenge to free enterprise in the practice of pharmacy and the manufacture of drugs. Public attitudes respecting the cost of medical care and drug prices can, over the long pull, substantially alter public attitudes about socialized medicine.

Today a few pills costing perhaps several dollars are often the equivalent of what used to be a perilious illness with long disability, loss of earnings, hospital and nursing expense and a convalescence that sometimes lasted for months.

For instance, Dr. Ivor Griffith made a study of the cost of a case of pneumonia in a Philadelphia hospital in 1927. He found that the average bill of the hospital, doctors, and nurses amounted to $358.00 and the duration of hospitalization averaged five weeks. During this time and a subsequent convalescent period, the loss of earnings brought the total cost of the illness up to approximately $1,000—and that was when $1,000 really was $1,000. In 1953, the average duration of lobar pneumonia was less than two weeks with no period of convalescence required. Most cases were treated at home with antibiotics costing the patient approximately $15.12, if penicillin was used, and $29.68, if one of the broad spectrum antibiotics was employed. While we have no comparable figures for loss of earnings, it is nevertheless evident that a great economic saving has been achieved. Added to this is the fact that many potential cases never get to be full blown

pneumonia because of the prompt use of antibiotics. Most important of all is the fact that the undertaker used to get one good funeral out of every five cases of lobar pneumonia, whereas today we have deprived him of almost all of this business. Perhaps it just isn't human nature to feel deeply grateful for having been spared a perilous illness that everyone knew wasn't going to happen. In the old days, when patients were snatched from death's door after a period of mortal peril and suffering, there was less complaint about the cost of medical care.

There are some 40 million cars on the road. Today people are perfectly cheerful about spending $2,500 to $5,000 to replace cars that we know from World War II experience are good for several more years of service. And yet, those same people cry to high Heaven if they are charged a small fraction of that amount for the medical services that may save their very lives or at least make them worth living.

You and I know that, on the whole, drug prices have advanced far less than those of most other commodities during the past fifteen years of inflationary pressures. Actually, the per cent of disposable personal income spent for medical care, which includes drugs, was less in 1952 than it was in 1939 and only nine hundredths of 1 per cent greater than it was in 1935. The public spends far less for medicines than it thinks. In 1952, the per capita consumption of drug preparations and sundries was $10. Imagine, just $10 a year, on the average, to keep well and to prolong life! How does this expenditure compare with others about which the public remains silent? Here are the per capita expenditures in 1952 for a few other products and services:

Alcoholic beverages	$55.00
Tobacco products	32.00
Interest on personal debt	12.50
Auto repair, greasing, washing, parking, storage and rental	11.00
Admissions to specified spectator amusements	10.00

And here is a comparison that should make us wince. Whereas, personal consumption expenditures in 1952 for drug preparations and sundries amounted to $1,623,000,000, death expenses (funeral and burial service, cemeteries and crematories, monuments and tombstones) cost the American people $1,218,000,000. We spend practically the same to bury our dead as we do to stay alive —but we seem to object to the cost of staying alive. The irony of it is that we can't escape the expense dead or alive. The statistics I have here cited are official figures. Authority for them is the U. S. Department of Commerce.

These figures, if known to the public, could produce a vast change in its opinion concerning the cost of medicines. Yet they do not tell the whole story. They say nothing of the savings in health and in hard dollars which the American people have made by virtue of the contributions of scientific research. Indeed, I would venture the guess that the advances in therapeutic agents and in medical care during the past decade alone account for far greater economic gain than is represented by the total cost of medicines today.

We have almost completely ignored this citically vital public relations job, on which the whole future of American medicine, pharmacy, and the pharmaceutical industry may depend.

It has been a great privilege to have a place on this program as a representative of the pharmaceutical industry. Your kindness in asking me to participate is recognition of the fact that we have something in common, and the common purposes we serve are the elimination of disease, the alleviation of suffering, and the prolongation of life. Can there be nobler objectives? It is encouraging to me, as I know it is to everyone in my industry, to realize that the physicians of Michigan look upon us as partners in progress. Working together as partners I have the deep conviction that what is past is merely prologue to the greatest era medicine has ever known.

A solid ovarian tumor is probably cancerous.

* * *

If *painless* nodules are found in the pouch of Douglas, the patient probably has a cancer of the ovary.

* * *

The most important single fact in clinically identifying a growth in the ovary is the patient's age. *If she is over forty, she is more likely to have cancer.*

* * *

The best tool to combat the present high rate of inoperability of ovarian tumors is the periodic pelvic examination.

Food retention, regurgitation and constipation are often the earliest symptoms of an obstructive pyloric carcinoma.

* * *

If the physical condition or age of the patient contraindicates any type of surgery, radiation therapy may give temporary relief from intestinal obstruction in some instances.

* * *

Lesions of the pancreas rarely respond even temporarily to external irradiation or implantation of radon seeds.

St. Luke's Hospital Clinico-Pathologic Conference

Edited by Chandler Smith, M.D.
Saginaw, Michigan

Clinical Record

THE patient was a white male infant, two months old, who was well until 7:00 p.m. on the day of admisison to the hospital. At that time, while being fed, the baby suddenly assumed the position of opisthotonos, the eyes rolled upward and remained momentarily fixed, and tremors were noted in all four extremities. This convulsion lasted about one minute. Shortly thereafter, a bluish red mottling of the skin of the entire body was noted. There was no crying or vomiting, and the temperature was normal. After this convulsion, the baby was relaxed and less alert than usual, but neither lethargic nor hyperirritable.

The gestation period and delivery of this baby had been normal and were without complications. Life began with a lusty cry, muscle tonus was normal, and there were no deformities. The baby progressed normally, and there had been no illness or injections. There had been no previous convulsions and there was no history of falling or injury to the head.

There were three siblings. Two boys, ages five and four years, were in good health and had not been sick. One baby girl, twenty-two months old, was born with congenital deformities that consisted of dislocated hips and shortening of both lower arms. All children were normally alert and none had experienced convulsions. The mother and father were well and neither had had symptoms referable to the central nervous system. A sister of the father had experienced severe headaches, and death at the age of forty years was clinically attributed to epilepsy or to brain tumor.

The baby was brought to the hospital at 8:30 p.m. Examination revealed a well-developed and normally hydrated infant in no distress. The respirations were 26 and the temperature was 99.3 degrees (F.). The head was of normal configuration and the scalp was intact without lacerations or bruises. The anterior fontanelle was soft. The pupils were round and equal and the reactions to light and accommodation were normal. There were no extra-ocular muscle paralyses. Papilledema and retinal hemorrhages were not detected on funduscopic examination. The ears were not remarkable, and no bulging, redness or bleeding was seen. The neck was supple. The nose and throat were not remarkable. There was no enlargement of cervical lymph nodes. Auscultation and percussion of the lungs were normal. The heart was not enlarged, the rhythm was regular, and no murmurs were heard. The abdomen was soft and no masses were palpated. The external genitalia and extremities were normal. The biceps, triceps, and patellar deep tendon reflexes were active, equal, and normal. Painful plantar stimuli elicited prompt withdrawal. The Babinski reflex was not elicited. The neck and all extremities were supple.

The parents were advised to return home as the baby appeared well and the history was suggestive of a breath-holding episode. However, before this could be undertaken, and approximately twenty-five minutes after admission, the baby suddenly experienced a second convulsion, with rigidity and mild tonic and clonic movements of all extremities. This was accompanied by pronounced opisthotonos with backward displacement of head and feet. The eyes appeared prominent and were momentarily fixed in a straight forward direction. The anterior fontanelle was now noted to be distended. This convulsion lasted about one minute and was followed by carpo-pedal spasm lasting ten to twelve seconds. Mild inspiratory difficulty was noted, and the skin revealed slight cyanosis and pronounced bluish red mottling. Approximately twenty minutes later, a similar convulsion was again experienced, and this was also accompanied by respiratory difficulty, mottling of the skin, and slight cyanosis.

Hematologic examination revealed 10.8 grams of hemoglobin per 100 cc. There were 3,000,000 erythrocytes and 17,000 leukocytes per cu. mm. Differential count of 100 cells revealed 53 segmented granulocytes, 2 band cells, 41 lymphocytes, and 4 eosinophils. Lumbar puncture disclosed somewhat forceful release of grossly bloody spinal fluid. Crenation of erythrocytes was not seen on microscopic examination. A bilateral parietal subdural tap was then attempted and no fluid was obtained. Radiographic examination of the head revealed a quite sharply defined linear translucency in the right occipital region that was not suggestive of a suture line, and appeared too sharply defined for a vascular channel. This was interpreted as a linear skull fracture.

An oxygen mask was applied, 6 cc. of calcium gluconate were injected intravenously, and caffeine sodium benzoate was given by intramuscular injection. A one-half grain suppository of dilantin was inserted rectally and an intravenous infusion of 5 per cent glucose in saline was begun.

During the next four hours, there were four additional convulsions similar to those described. The infant died at 11:00 p.m. on the day of admission.

Clinical Discussion

Dr. Paul V. Wooley: Review of this record reveals that a clinically well baby develops normally for a period of two months when a sudden dramatic change takes place that is characterized by convulsions and death after a period of four hours. Such a history is suggestive of injury. There were two boys in the family,

ages four and five years, and it is customary for siblings to handle infants clumsily so that the baby could have been dropped. However, the record states that there was no trauma, and I am sure that interrogation in this regard was thorough. We note from the history that a



Fig. 1. Recent subarachnoid hemorrhage over base of brain.

baby girl of twenty-two months was born with congenital deformities of hips and arms. This suggests the possibility of a congenital deformity of this baby. However, in my experience, a woman who produces one deformed baby usually passes through a period of sterility of four years or so before bearing a second baby with congenital deformities. The mother of this baby has not shown this pattern of pregnancy, and the history does not suggest that this baby is malformed.

The baby is brought to the hospital, and the physical examination is not revealing. The anterior fontanelle is said to be soft and flat. It would be helpful to have a more detailed description of this observation as this information may be misleading. However, I assume that the examiner was experienced, that the infant was at rest, and that the observation is accurate. It would also be helpful to know the type of resonance elicited by percussion of the skull. The most useful information could have been obtained from the mother at this time and would include her opinion of this baby as to a comparison of behavior, before and after the first episode, strength of grip, and general appearance. The neurologic examination provides no help.

The diagnosis at this time was a breath-holding episode. These are simulated before the age of two months by the temporary alkalosis that results from screaming and over-breathing. True breath-holding episodes accompanying epilepsy and frustration are characteristic of a later age.

The baby now has a second convulsion and opisthotonos is again apparent. The fontanelle is now noted to be distended. This observation is of no value if the baby were straining as distention accompanies such mild exertions as coughing. There was also mottling of the skin which probably represents autonomic stimulation about the medulla.

The red blood count is lower than expected, although interpretation requires correlation with the birth weight. The spinal fluid appears to be under increased pressure and the fluid is red. I do not believe that blood in all of the spinal fluid results from traumatic insertion of

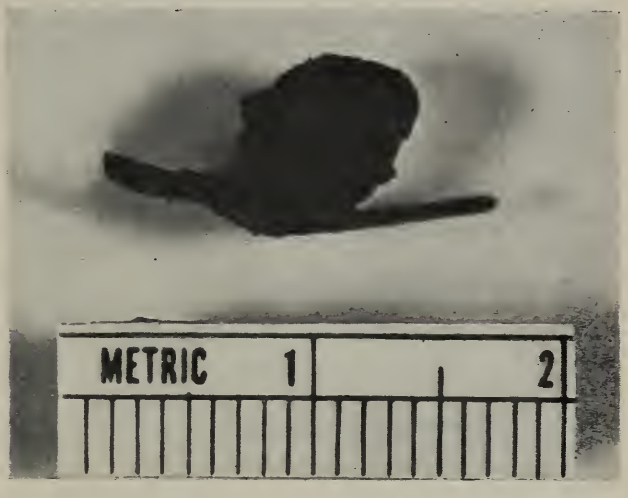


Fig. 2. Saccular aneurysm of left anterior cerebral artery.

the needle. Therefore, I am certain that subarachnoid hemorrhage has occurred. I want to point out that bloody spinal fluid need not preclude estimation of the contents of that fluid. It is simply necessary to repeat the erythrocyte count at the time the spinal fluid is drawn, count the red cells in the spinal fluid, and calculate the dilution of that fluid with blood. The same holds for the leukocyte count or protein determinations, allowance being made in each case according to the factor of dilution. We now come to the x-rays, and I would like to see these.

Dr. H. T. Caumartin: X-rays of the skull reveal a linear translucency at the base of the right occipital bone that is apart from the lamdoidal suture and is too sharply defined for a vascular channel. I therefore believe that this represents a fracture of the occipital bone.

Dr. Wooley: The possibility of skull fracture remains for the reason that fractures in infants retain the appearance of a recent break even though the fracture is old. However, in this patient there is no history of injury, and no soft tissue reaction is apparent on the x-rays or on physical examination at that site. For these reasons, I do not believe that the principal lesion in this infant is a recent skull fracture.

In summary, we have an apparently well baby who suddenly experiences several convulsions and dies four hours after the onset. The bloody spinal fluid under increased pressure establishes subarachnoid hemorrhage. The record states that crenated red cells were not found and indicates that this means that the hemorrhage was recent. Crenation of erythrocytes is a function only of the osmotic pressure of the medium in which the red cells are suspended; only hemolysis with xanthochromia of the fluid measures age of hemorrhage. However, the clinical evidence strongly indicates that the bleeding was recent.

Excluding trauma, there are three other conditions to be considered. The first is pachymeningitis hemorrhagica. This occurs in poorly nourished marasmic babies rather than in healthy infants, and is thus dismissed. Occasionally closure of the ductus arteriosus is delayed, and with this event emboli may be carried

in the arterial stream to occlusion of peripheral vessels. These emboli are often multiple, and lodgement usually occurs in renal. popliteal, or femoral vessels. Arterial occlusions of this type are ordinarily accompanied by the localizing signs of ischemic necrosis. In the absence of such signs, this possibility is discarded.

We are left with the congenital aneurysms about the circle of Willis. These are occasionally seen during the first two to three months of life, later at the age of eight to ten years, and then not until after the twentieth year. Premonitory signs are attributed to bleeding into the aneurysmal wall and to pressure of the sac against cerebral tissue. Rupture is sudden, subarachnoid hemorrhage is extensive, and death usually occurs quickly. Although this lesion at two months of age is not seen often, I believe that sudden death frequently precludes hospital admission, and the true incidence of such aneurysms is not indicated by autopsy records. My diagnosis of this case is recent rupture of a congenital aneurysm of the circle of Willis.

Dr. Wooley's Diagnosis

Rupture of aneurysm of circle of Willis.

Anatomic Diagnoses

Congenital saccular aneurysm of left anterior cerebral artery with recent rupture.

Recent subarachnoid and intracerebral hemorrhage.

Dr. J. C. Smith: Autopsy examination revealed extensive recent subarachnoid hemorrhage over the base of the brain (Fig. 1). After fixation, dissection revealed a saccular aneurysm (Fig. 2) of the left anterior cerebral artery adjacent to the communicating branch. The aneurysm was filled with thrombus. Rupture occurred over the superior surface so that the hemorrhage, under systolic pressure, forced perforation through the cerebral tissue into the right lateral ventricle. Blood then flowed freely through the ventricular chambers and issued into the subarachnoid space about the medulla.

It has long been undecided as to whether saccular aneurysms of the circle of Willis are of congenital or acquired nature. Arteriosclerosis has been held to be the cause for the reasons that most occur in adulthood and the adjacent vessels in these cases reveal arteriosclerosis. The prevailing opinion, however, is that these aneurysms, not present at birth, develop as a result of focal congenital defects of the arterial media of the vessels of the circle of Willis at points of branching of tributaries. Because of the absence of formed aneurysms at birth, the congenital nature of the lesion has been difficult to establish. McDonald and Korb[1] cited 1,125 cases reported to 1938 in a review of the literature. The youngest was one and one-half years, and only 11 per cent were under twenty years. This review indicates the rarity of the present case, and the latter supports the prevailing opinion that the saccular aneurysms are of congenital nature.

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ARTERIAL REPLACEMENT WITH NYLON PROSTHESES

(Continued from Page 523)

Summary

Non-viable tubes constructed from nylon fused with polyethylene were inserted as vascular grafts in the aortas of fifteen dogs and the femoral arteries of five dogs. It was found that these tubes remained patent in fourteen of fifteen aortic grafts (93 per cent), but in only two of five femoral grafts (40 per cent). By gross and histologic study it was noted that the non-viable tubes eventually became incorporated into new fibrous living tubes. These acted as satisfactory grafts and ultimately became lined with endothelium. Patency and lack of aneurysm formation were observed as long as six months after introduction of a graft.

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Detroit Surgical Association

Meeting of January 23, 1956

DETERMINATION OF CUTANEOUS BURN DEPTH IN EXPERIMENTAL ANIMALS BY THE USE OF RADIOACTIVE PHOSPHORUS

By James E. Bennett, M.D.,

Junior Clinical Instructor in Surgery, University Hospital, Ann Arbor.

This study attacks the problem of determining cutaneous thermal burn depth by means of parenterally administered P-32 with subsequent external counting over the burned areas of skin. Young swine were used in this study. Small standard contact burns were inflicted on the backs of each animal, utilizing a brass container, through which water was circulated from a constant temperature bath via a circulating pump. Using a time constant of one minute, it was found that burns of superficial, partial and full thickness could be produced by varying the temperature from 52 to 75 degrees centigrade.

Radioactive phosphorus was administered to the animals on the day of burning and/or at intervals of 24, 48, 72 and 96 hours post burn. External counting determinations were then performed over normal skin and each burn. Counts were taken with the probe of a count rate meter held in close proximity to the skin. The uptake of phosphorus consistently varied with the depth of burn. As compared to normal skin, the superficial burns showed a slightly increased uptake, the deep partial thickness burns a slight decrease in uptake and the full thickness burns a very low uptake, usually two to three times lower than normal skin. These differences were presumably due to varying changes in circulation, depending on the severity of the burn.

PATHOLOGY, DIAGNOSIS, AND TREATMENT OF EXTRA-ABDOMINAL DESMOID TUMORS

By Robert H. Ramsey, M.D.

The relatively uncommon extra-abdominal desmoid tumor is a treacherous benign lesion. Failure to be aware of its peculiar pathological traits has led to its mismanagement in many instances.

A description of eight cases is given and diagnostic features emphasized. Differentiation from fibrosarcoma is of prime importance because of pathological similarities and treatment differences. Since the desmoid tumor is a non-metastasizing, but locally invasive lesion, radical local surgical excision is the treatment of choice. If this cannot be accomplished without sacrificing an extremity, incomplete removal is then in preference.

A COMPARATIVE EVALUATION OF URETEROILEOSTOMY AND URETEROSIGMOIDOSCOPY

By Robert M. Whitrock, M.D., Assistant

Professor of Surgery, Wayne University College of Medicine, Detroit.

A comparative study between ureteroileostomy and ureterosigmoidoscopy was carried out in a group of dogs. The ureteroileostomy was established by using a 12 cm. segment of ileum isolated from the gastrointestinal tract 16 cm. from the ileocecal valve and developed as an isoperistaltic Thiry loop. Both ureters were anastomosed into the proximal portion of this loop using the Nesbit mucosa to mucosa technique. The ureterosigmoidoscopy was established by anastomosing a cuff of bladder about each ureteral orifice to the low sigmoid, preserving the intrinsic uretero-vesical sphincter. The study was carried out in three groups of animals.

Group I. Bilateral ureterosigmoidoscopy. The kidney and ureteral preparation revealed gross and microscopic pyohydronephrosis. Blood electrolyte studies demonstrated an early, moderate hyperchloremic acidosis.

Group II. Right ureterosigmoidoscopy and left ureteroileostomy in the same animal. Gross and microscopic examination revealed pyohydronephrosis and cortical abscesses of the right kidney and ureter. The left ureter and kidney were normal. Blood electrolyte studies again demonstrated a moderate hyperchloremic acidosis.

Group III. Bilateral ureteroileostomy. Gross and microscopic examination revealed normal kidneys and ureters bilaterally. Blood electrolyte studies demonstrated a severe, early and fatal hyperchloremic acidosis resulting from the ingestion of urine when the animals licked their ileostomies. This severe, electrolyte imbalance was corrected by preventing the animals from reingesting their urine, although a mild, hyperchloremic acidosis persisted during the postoperative period.

Clinical experiences with the ureteroileostomy in both adults and children was an entirely successful method for the diversion of the urinary tract. There was no evidence of electrolyte imbalance or residual urine in the ileal loops. The patients were comfortable and dry through the use of a glued-on Davol ileostomy appliance.

Meeting of February 27, 1956

GALLSTONES: SOLUBILITY STUDIES

By Robert G. Lutton, M.D., and Alfred M. Large, M.D.

For a long time, it has been known that human gallstones placed in a dog's gall bladder will gradually disappear. This observation has been confirmed in our laboratories, and *in vitro* studies have been performed to determine the effect of human as well as dog bile upon gallstones obtained from the gall bladders of several patients.

These experiments tend to support the view that the concentration of cholesterol in the bile is the most important single factor concerned in the solubility of and probably also in the formation of gallstones, but also illustrate the fact that other substances such as bile salts and lecithin likely play a not insignificant role.

EARLY DIAGNOSIS OF CARCINOMA OF THE CERVIX UTERI

By Esther H. Dale, M.D., Osborne A. Brines, M.D., Gerald S. Wilson, M.D., and Harry M. Nelson, M.D.

Results obtained at the Yates Memorial Clinic have been used as the basis of statistical studies related particularly to the early diagnosis of carcinoma of the cervix uteri. In a series of 15,832 women, carcinoma of the cervix was proved histologically in 0.95 per cent. Papanicolaou smears were a routine procedure in the examination of these women and are credited with primary detection of 42.8 per cent of the cases of cervical carcinoma found in this series, because neither history nor physical examination aroused any suspicion of malignancy in these cases. The exfoliative cytological technique has been found sufficiently sensitive and specific to be a very effective diagnostic aid in cancer detection, especially of the cervix uteri. Some of the statistics tend to refute the prevalent idea that cervical carcinoma involves the middle-aged or older women almost exclusively, inasmuch as approximately one-third of the biopsy-positive cases of cervical carcinoma in this series occurred before the age of forty years.

COBALT 60 TELETHERAPY IN THE PALLIATION OF GASTROINTESTINAL CARCINOMA

By Charles R. Williams, M.D., James E. Lofstrom, M.D., and S. Balosfky, M.D.

A group of forty-five patients with advanced gastrointestinal carcinoma was given Cobalt^{60} Teletherapy in an attempt at palliation.

The average dose rate was 5000 to 6000 gamma roentgens, in depth, in five to six weeks.

Of the entire group, 62 per cent received no or minimal palliation, while 29 per cent had moderate to good relief of symptoms. The remaining 9 per cent were placed in an indeterminate group. The greatest benefit was noted in patients whose chief complaint was pain.

The average survival time following completion of irradiation was four to six months. Patients well palliated did not necessarily live longer than those not relieved at all.

Radiation reactions were remarkable in their absence; 91 per cent of patients had no or minimal symptoms due to therapy. In no case was it necessary to discontinue treatment due to intolerance of irradiation.

It would be difficult to say, with assurance, that more than 29 per cent of these patients derived any definite benefit from irradiation. However, in this group, palliation was frequently pronounced as well as prolonged.

PATHOGENESIS OF HYPERTENSION

(Continued from Page 537)

Summary

Etiological factors of hypertension are divided into two groups: (1) hypertension of known etiology, (a) renal hypertension, (b) cerebral hypertension, (c) endocrinal hypertension, (d) cardiovascular hypertension; and (2) hypertension of unknown etiology. The pathogenesis of each is discussed separately.

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Medical Education

When MSMS representatives met to plan Michigan participation in the first nationwide observance of Medical Education Week (April 22-28), they reviewed the long-range program of the medical profession to broaden medical service throughout Michigan.

Medical education recently has been stepped up tremendously in Michigan. Our two medical schools will graduate more than 250 M.D.'s this year, compared with 150 in 1950. Thanks to expanded facilities, total enrollment of medical students at University of Michigan and Wayne University has grown to 1,034 in the current school year; in 1950 these schools were "bursting at the seams" with 743 undergraduate medical students. Beyond these, the two medical schools today have a teaching responsibility for an additional 2,400 students enrolled in such fields as dentistry, nursing, public health, medical technology, and postgraduate medical study.

Although most M.D.'s educated in Michigan remain to practice in the state, we still must depend heavily upon attracting graduates from the seventy-nine out-of-state medical schools to maintain or improve our present favorable ratio of physicians in a population which continues to grow rapidly.

In 1950, only 421 new Michigan medical licenses were issued. During the 1955 fiscal year, Michigan issued 631 new licenses, or 391 more than the number of M.D.'s graduated by Michigan's two medical schools during the same period.

However, even though the supply of doctors is increasing, present facilities for medical education cannot hope to keep pace with Michigan's rising population, which probably will reach the 9,000,000 mark in less than twenty years. Michigan will continue to attract M.D.'s from outside its own borders; but, with stiffening competition from other states now and in the future, we may have to train more doctors within Michigan.

With this as a strong possibility—a third medical school, expansion of the present facilities, or a combination of the two—MSMS and the medical profession must continue to take a role of leadership in plans for broadening medical service for the people of Michigan.

W. D. Jones.

President, Michigan State Medical Society

President's



Message

Editorial

HEART PAPERS

In this issue of THE JOURNAL, we are publishing a group of papers on heart conditions and research. These papers were prepared originally for publication in the January, 1956 number, but through a sequence of occurrences, several conflicting duties, and primarily a misunderstanding, added to too many papers waiting for publication, these particular papers were held over until they could be presented in a group; this number is the first in which that could be done. We hope the authors and the officers of the Michigan Heart Association will be content. The papers are appearing in a group as they wished. The MHA Secretary, Dr. J. G. Bielawski, has been very considerate and very helpful.

MICHIGAN LEGISLATION

Third Medical School

As this editorial is being written, we can report that the Senate of the Michigan Legislature has passed an appropriation bill providing $3,239,633 for the operation of Wayne University as a state institution. The financing obligations are to be assumed entirely in three years by increasing appropriations: $6,400,000 in 1957 and $9,800,000 in 1958, after which Wayne University will be the total responsibility of the State. The details of transfer, new governing body and other items will have to be settled by cooperation and conference in the House of Representatives.

Mention of Wayne University brings up the third medical school for Michigan. Last month we reported that interests in Flint were ready to cooperate in establishing a branch medical school in Flint. The *Detroit Free Press*, March 25, contained a news story from Flint quoting the President of the Genesee County Medical Society expressing the Society's opposition to a medical school in Flint.

Following the discussion and petitions for the establishment of a third medical school in the State of Michigan and accentuated by the decision to make Wayne University a State University, we must relate two actions being considered in the Legislature:

1. House Concurrent Resolution No. 28 calls for a six-member committee, three each from the House and the Senate, with advisors from the Michigan State Medical Society, the State Board of Education, and the three Universities. The committee would be empowered to determine the need for additional medical education facilities, and to recommend the most desirable manner of providing such facilities if a need is found. On March 23, this measure was amended in the House "to include the study of existing laws and regulations pertaining to licensing and practice of medicine." This legislative committee would duplicate the work now being done by a committee appointed by President Harlan Hatcher of the University of Michigan, with Dean A. C. Furstenberg, chairman, following requests addressed to the Board of Regents asking for the establishment of brances of the medical department of the University.

2. Senate Resolution No. 19, introduced by two Republicans and five Democrats, would create a five-man interim committee "to study methods and procedures whereby an *Osteopathic College of Medicine* could be established within Michigan." The implication is that such an osteopathic school would be a state institution. The resolution states erroneously that "at the present time osteopathic physicians and surgeons can participate in and provide medical and surgical care under *all* state and federal health and welfare programs."

In another column, we quote from a statement of the Kalamazoo Academy of Medicine urging that before a third medical school is started in Michigan that Wayne University College of Medicine be expanded to its economic and maximum capacity.

NATIONAL LEGISLATION

The administration's program to provide medical and hospital care on a prepayment basis with government partial payment and payroll deduction for the civil employees and their families, has simmered down to a "major medical coverage plan," but as yet no specific bill. It *had* been planned to arrange for a complete medical, sur-

gical and hospital program such as Blue Cross and Blue Shield have to offer. Several years of negotiations have served only to muddle the efforts. Uniform programs were asked by those in charge of the negotiations. There are over two million civil employees, with approximately five million dependents.

Commercial companies have proposed pooling their interests, letting one company spearhead the program and reinsure, distributing the work among the many. Blue Cross and Blue Shield, through the national commissions, have proposed using their programs, with each plan serving the people in its certain area and offering the same coverage they now offer to all their subscribers. The program was not accepted.

The Civil Service Commission has abandoned plans for basic and normal hospital and medical care for its employees, and announces a program to pay 75 per cent of all costs after the employee has paid $500 for hospital expenses, $250 for surgical expenses and from $100 to $200 for medical expenses per year for each member of the family: There would be a limit of $5,000 per year per person and $10,000 for life, but with reinstatement upon proof of recovery.

More than two million federal employees, voluntarily and on their own account, have enrolled in Blue Cross-Blue Shield. This so-called major medical coverage is scarcely needed in Michigan. Hospital bills of $1,000 or more are being paid every thirty minutes of the working day, and $3,000 to $5,000 charges are not uncommon.

This scheme is not yet in legislative form, but has been announced. Blue Cross-Blue Shield seem to have been eliminated because there is no master plan to co-ordinate all and meet the required services.

SERVICE MEN'S DEPENDENTS

Negotiations are still in progress to furnish care for the dependents of service men. It was thought the Home Town plan in use in Michigan and some other states could be extended to cover the people in question. That is actually a cost-plus-expense plan. There is nothing in it for Blue Shield except the satisfaction of having served the people in a worthy cause. Michigan Medical Service makes no profit but makes possible with the least amount of effort the care wanted for these dependents. Just recently an amendment opposed by the medical profession has been added. It has been stipulated that where there are sufficient military doctors, these dependents may use military installations and personnel. It had been hoped this work would be given to civilian doctors except where there is none available.

TAX-FREE ANNUITIES

The Jenkins-Keough Bills (HR 9 and 10) are still under consideration. Opposition from government is mainly that these provisions would lessen the income tax totals, and the Treasury needs money. As all our readers know, these Jenkins-Keough Bills provide that under certain specifications the doctor, or other self-employed professional man, during his maximum income years, may set aside sums up to a certain per cent of income each year for investment in approved annuities or securities, up to a life-time limit of $100,000. Self-employed persons are not asking anything unusual. Every big (or small) industry can and does build up retirement funds in behalf of its executive personnel to pay suitable and sometimes very large incomes after retirement. At retirement, this income is taxable at the going rate as received. We are asking nothing more; in fact, we are asking much less.

The Journal has been advocating this adjustment of privileges for more than ten years. It is hoped and believed a good chance prevails now for favorable action in Congress if our doctors keep active. If we accept reports that the plan will surely pass, but do nothing, we shall lose out again. Government wants the tax money, and if too many voters keep quiet there will be no action.

Legislative advisors hope two of these items will pass, Jenkins-Keough, and Home Town Care for service men's dependents (without the last amendment). The care of civilian employees, as now outlined, does not offer much. The Blue Cross-Blue Shield programs, as outlined, would give people the same care to which they have become accustomed. It is not necessary to furnish the same services country wide. There are eighty-three Blue Cross and seventy-one Blue Shield plans, and a master plan has not yet been developed.

MICHIGAN MEDICAL SERVICE BLASTED

To those of our members who saw the *Detroit Free Press* on Tuesday, March 20, 1956, and to the others who heard about the several articles

we only have to say that the UAW has made drastic and positive charges, and not only against Blue Shield, for having failed to enforce the contract limitations on extra charges. The most important allegation is against the doctors themselves. The first headline carries the story: BLUE SHIELD "GOUGING" LAID TO SOME DOCTORS—*They Pad Bills, UAW Study Says.*

UAW took samples of cases from Blue Shield files in 1954, all supposed to be UAW men. Of these, 1,032 persons held the $2,500 income limit contract, and 466 held the $5,000 limit contract. All persons possible were contacted and interviewed by telephone; others were sent to the local unions and some were called upon at their homes. The polling was carried out by shop stewards or a team from the UAW head office.

Reporting findings, UAW says:

"Our survey shows, in brief, that there is very little enforcement of either the spirit or the letter of the full-payment terms of the Blue Shield Contract." "The Blue Shield Plan has not adequately explained to the subscribers that persons earning less than the income ceiling are entitled to full payment of their surgical bills if they go to participating doctors. Full payments under the $5,000 contract are not being lived up to by a great many doctors." "The $2,500 contract did not pay the full bill in four out of five cases." "For those reporting incomes of less than $5,000, forty-four out of 135 (32.6 per cent) received full payment."

The survey did not enquire whether the patients had waived the income limit by accepting the doctor's price or by occupying private rooms at the hospital. The report states that in fifty-seven cases of admitted over-income, eighteen were fully paid, and the others are counted as overcharges. The survey asked what operations was performed, the surgeon's name, and the amount of overcharge if the bill was not fully paid, also whether any other bills were paid to other doctors.

A study of the cases included in this survey is being made by Michigan Medical Service where professional courtesy permits. Many of the cases were at Ford Hospital which meticulously follows the regulation. The doctors at Ford are not individually interested in charges made to patients for medical care. It is presumed that Ford Hospital cases will not carry overcharges. The very first case on top of the file was that of a man who had been hospitalized three times for three different surgical attentions and for 111 days, all but eight days of which had been in private room. The chart was marked at the hospital as "over-income." This case should have been rejected, but was used to show enormous overcharge. Blue Cross had paid over $5,000 and Blue Shield over $600. The patient had paid out about $1,500. He did not have medical coverage.

The *Free Press* is continuing the articles on Blue Shield, beginning Sunday, March 25, with a very fair statement of methods doctors have used from time immemorial to determine charges to patients. Completion of the series is necessary before judgment is passed, and then it will be the judgment of the people served by newspapers using the stories.

Another serious criticism is that doctors' charges are too high. That is something Michigan Medical Service or the Michigan State Medical Society cannot control. The Michigan State Medical Society pioneers have built, from nothing, a service of astounding achievements. Half the people of our state are protected. With complete confidence and co-operation, the limits of good deeds are incomprehensible. Such success demands that the profession take another look. National Compulsory Health service was on our necks, and the UAW is still demanding "complete health service at no cost to consumer."

The private practice of medicine is our right, and only our own acts will change what has become so firmly re-established. Blue Cross and Blue Shield are great public trusts, not fountains of gold that could be dried up.

While this editorial was being written, the editor received a long distance call from a worker in the Professional Management program saying that in several years of looking over doctor's accounts and charges, he had not seen a single case of overcharge knowingly made on an under-income limit patient. It is hoped his observation is true in its final analysis. During the past eight months, fifty-four complaints of overcharges have been taken to MMS headquarters. Every one was adjusted. That service has been available for many years, and Michigan Medical Service hopes disgruntled patients will avail themselves of every legitimate opportunity to adjust misunderstandings. If, in this service, unethical conduct is uncovered, the Council of the Michigan State Medical Society has directed such cases to proper medical organizations. Economics, not ethics, is the basis of Michigan Medical Service.

1956 MCI Scientific Program Acclaimed Finest Yet

In the opinion of a majority of MSMS members who attended the 1956 session, the most valuable scientific program in the ten-year history of the Michigan Clinical Institute was presented March 7-8-9 in Detroit.

During the three-day postgraduate meeting thirty guest lecturers, including thirteen from leading medical centers outside of Michigan, reviewed the practical aspects of progress within the past year in many important fields of medical and surgical care. Several of the best-known and most-respected members of the medical profession were among those who reported most recent developments adaptable to the daily practice of Michigan doctors of medicine.

L. W. Hull, M.D., of Detroit, former MSMS President, served as General Chairman of the 1956 Michigan Clinical Institute. William S. Reveno, M.D., of Detroit, was Chairman of the Program Committee.

The excellence of the program brought a total M.D. registration only 365 short of the registration at the record-breaking 1955 meeting, in spite of the winter's worst weather conditions.

Once again, the three-way teamwork among the pharmaceutical profession, the pharmaceutical manufacturing industry, and the medical profession in the rapid progress of medical science and knowledge was emphasized throughout the scientific assemblies and at the awards luncheon on Thursday, March 8.

The awards luncheon was one of several successful special events held in conjunction with the 1956 MCI. Others included the two-day Operating Room Nurses Conference on March 8 and 9, the MSMS Conference for Residents, Interns and Senior Medical Students on March 7, and a special cancer control luncheon on March 7 sponsored by the two Michigan divisions of the American Cancer Society, with cooperation from the Michigan Cancer Coordinating Committee and the Michigan Foundation for Medical and Health Education, Inc.

At this luncheon on cancer control, 102 guests were present, including Cancer Society volunteers and M.D.'s The speakers and honored guests were Alton Ochsner, M.D., of New Orleans, La., and Owen H. Wangensteen, M.D., of Minneapolis, Minn. Details of the luncheon were arranged by the Michigan Division and the Southeastern Michigan Division of the American Cancer Society, with Edward W. Tuescher, Executive Director of the Southeastern division, in charge. C. Allen Payne, M.D., of Grand Rapids, Chairman of the Michigan Cancer Coordinating Committee, served as toastmaster.

At the March 8 testimonial awards luncheon, special recognition was given several M.D.'s for service to their profession, and to Michigan newspapers, radio and television stations for distinguished service to Medicine and Health. W. B. Harm, M.D., of Detroit, Vice Chairman of The Council of MSMS, acted as Chairman and Toastmaster.

Walter H. Winchester, M.D., eighty-one-year-old Flint general practitioner selected by the MSMS House of Delegates as "Michigan's Foremost Family Physician" of the year, was formally presented with his award. Fredrick F. Yonkman, M.D., of Summit, N. J., native of Michigan who is now Vice President of Ciba Pharmaceutical Products, Inc., was honored both by MSMS and the Michigan State Pharmaceutical Association. Dr. Yonkman was the official representative of the drug manufacturing industry at the 1956 MCI.

Special tribute was paid to nine MSMS members who are serving as presidents of national medical organizations. They are: From Ann Arbor—William H. Beierwaltes, M.D., American Federation for Clinical Research; Arthur C. Curtis, M.D., American Board of Dermatology and Syphilology; Russell N. DeJong, M.D., American League Against Epilepsy; Thomas Francis, Jr., M.D.,

1956 MCI REGISTRATION

Here is the final tabulation of registrants at the Tenth Annual Michigan Clinical Institute at the Sheraton-Cadillac, Detroit, March 7-8-9:

Doctors of Medicine	1,421
Nurses	277
Guests	401
Exhibitors	376
Total	2,475

Photo Highlights of Tenth Annual MCI



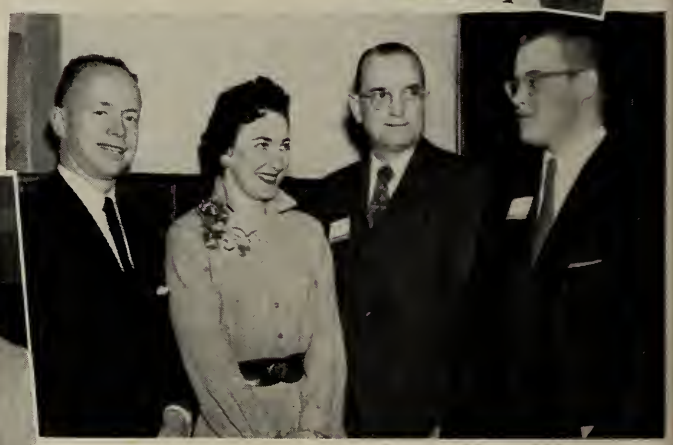
TEAMWORK between Pharmacy and Medicine was stressed. Henry J. Maicki, Detroit, President of the Michigan State Pharmaceutical Association; Frederick F. Yonkman, M.D., Summit, N. J., official representative of the pharmaceutical manufacturing industry, and MSMS President W. S. Jones, M.D., of Menominee, *(left to right)* exemplified this spirit at the March 7 testimonial luncheon.

TWO SPEAKERS well-known in cancer control presented scientific papers and were honored later at a special luncheon. Owen H. Wangensteen, M.D., of Minneapolis, Minn. *(at right)* was greeted by C. Allen Payne, M.D., of Grand Rapids, Chairman of the Michigan Cancer Co-ordinating Committee, which sponsored Dr. Wangensteen's appearance. Alton Ochsner, M.D., of New Orleans, La., *(left, below)* was sponsored by the Michigan Foundation for Medical and Health Education, of which Earl I. Carr, M.D., of Lansing, *(right, below)* is President.









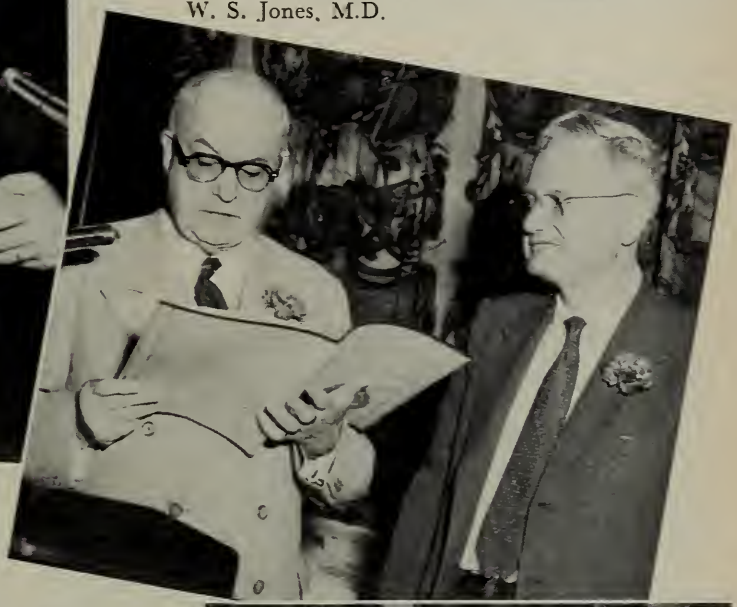
RESIDENTS, INTERNS and Senior Medical Students were guests at a conference March 7, arranged by MSMS. *(At left)* D. Bruce Wiley, M.D., of Utica, Chairman of The Council of MSMS, was conference chairman, and L. Fernald Foster, M.D., Bay City, MSMS Secretary, a principal speaker. Harvey Hallum, of Mead Johnson & Co., *(left, center)* played host at a reception following. *(Above, left to right)* Others taking an important part were: Chuck Davey, Detroit insurance agent and sports figure; Mrs. John C. Rawling, Flint; L. A. Drolett, M.D., Lansing, MSMS Legislative Chairman, and Frank B. Walker, M.D., Detroit resident physician.

SIX OUT OF NINE MICHIGAN presidents of national medical organizations were honored guests at the March 8 testimonial luncheon. *(Left to right)* Frederic Schreiber, M.D., Detroit; A. C. Furstenberg, M.D., Ann Arbor; C. S. Livingood, M.D., Detroit; A. C. Curtis, M.D., Ann Arbor; W. H. Beierwaltes, M.D., Ann Arbor, and R. H. Meade, M.D., Grand Rapids. Unable to attend were: Russell N. DeJong, M.D., Ann Arbor; Thomas Francis, Jr., M.D., Ann Arbor, and Wolf W. Zuelzer, M.D., Detroit.





"FOREMOST Family Physician" of the year, Walter H. Winchester, M.D., Flint, *(left)* received official recognition in behalf of his colleagues from MSMS President W. S. Jones, M.D.



FOR LEADERSHIP of Michigan Medical Service (Blue Shield) from 1942 to 1955, Robert L. Novy, M.D., Detroit, was honored twice. *(At right)* Wilfrid Haughey, M.D., of Battle Creek *(upper left)*, Dr. Novy's successor as Blue Shield President, presented a memento from Michigan Medical Service. M. A. Darling, M.D., President of Wayne County Medical Society, *(lower left)* presented a token from MSMS.





RECOGNITION for its support of Michigan's M.D. Placement Program went to The Upjohn Company, Kalamazoo. *(At left)* MSMS Councilor Ralph W. Shook, M.D., of Kalamazoo, *(right)* presented the award to W. Fred Allen, Upjohn Vice President.



SCIENCE WRITER Jean Pearson *(left)* shared with her newspaper, *The Detroit Free Press,* the MSMS Award for Excellence in Medical Reporting. Glenn E. Millard, M.D., of Detroit, her official MSMS host, presented an orchid before the ceremonies.



FOR MANY YEARS interested in Health and Medicine, John F. Wurz, Editor of the *Grand Rapids Herald, (at right, center)* received the MSMS Distinguished Health Service Award from President Jones. John F. Wurz, Jr., M.D., of Grand Rapids, *(third, right)* served as his father's official host.

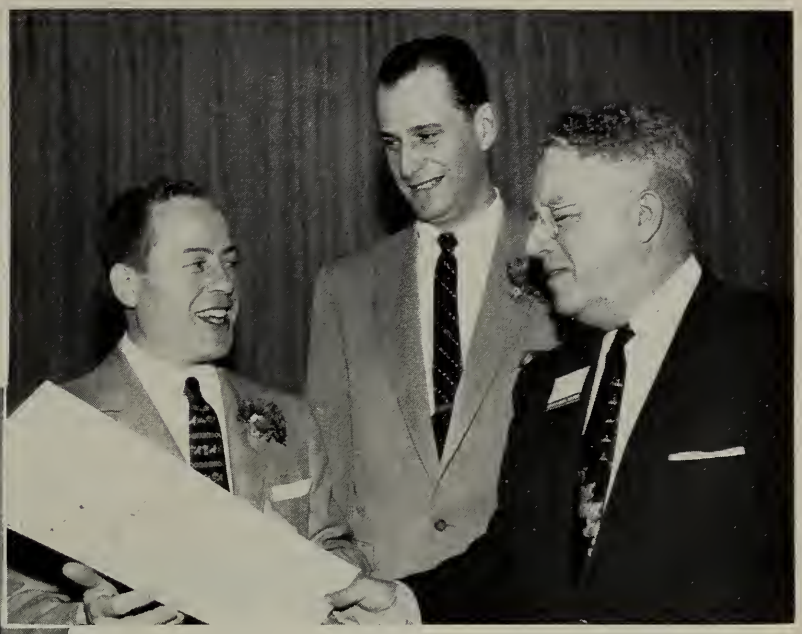


CO-SPONSORSHIP of a community medical forum with the Ingham County Medical Society prompted a scroll to the *Lansing State Journal.* Birt Darling, *State Journal* representative *(at left, center)* accepted the award from two fellow townsmen, MSMS Councilor O. B. McGillicuddy, M.D. *(left)* and Kenneth H. Johnson, M.D. Vice Speaker of the MSMS House of Delegates.



CITY EDITOR Tom Fallon, of the *Muskegon Chronicle, (first, right)* was congratulated by W. B. Harm, M.D., Detroit, Vice Chairman of The Council of MSMS, for his newspaper's sponsorship of a community medical forum in co-operation with the Muskegon County Medical Society. The Chronicle received the Distinguished Health Service Award.

TELEVISION and radio broadcasting stations, together with sponsors, received recognition for continued interest in presenting programs concerning medical information and progress.





FOR TELEVISION COVERAGE of medical progress, coupled with longstanding radio interest, MSMS gave its thanks to two Michigan broadcasting organizations. J. J. Lightbody, M.D., Detroit, (*upper photo, right*) made the presentation to Harry Lipson, of WJBK, Detroit (*left*) and Keith T. McKenny, of WJBK-TV. R. W. Teed, M.D., Ann Arbor *(lower photo, left*) performed the honors with Edward F. Baughn, of WPAG and WPAG-TV, Ann Arbor.





"TELL ME, DOCTOR", medical series transcribed by MSMS, has been broadcast over two radio stations continuously for eight years, sponsored by the same local pharmacies. Both stations and sponsors were honored. Otis Gaston, of WKZO *(upper photo, right),* displayed his scroll to Kyle Morris, of The Drug Shop (*left*) and R. W. Shook, M.D., all of Kalamazoo. From Benton Harbor-St. Joseph, William Gillespie (*lower photo, right*) accepted an award for both WHFB and Gillespie's Drug Store.

American Epidemiological Society; A. C. Furstenberg, M.D., American Academy of Ophthalmology and Otolaryngology; from Detroit—Clarence S. Livingood, M.D., Society of Investigative Dermatology; Frederic Schreiber, M.D., Harvey Cushing Society; Wolf W. Zuelzer, M.D., Society for Pediatric Research; from Grand Rapids—Richard H. Meade, M.D., American Association for Thoracic Surgery.

Robert L. Novy, M.D., of Detroit, President of Michigan Medical Service (Blue Shield) for fourteen years until last July, received mementoes from both Blue Shield directors and MSMS.

Also presented at the luncheon were awards to persons and organizations outside the medical profession. The MSMS Award for Excellence in Medical Reporting, top honor in the news field, went to the *Detroit Free Press,* represented by Managing Editor Frank Angelo, with a supporting award to Mrs. Jean Pearson, *Free Press* science writer.

Distinguished Health Service awards were presented to : John Wurz, Editor of *The Grand Rapids Herald;* the *Lansing State Journal,* the *Muskegon Chronicle;* WJBK and WJBK-TV, Detroit; WPAG and WPAG-TV, Ann Arbor; WKZO and The Drug Shop, Kalamazoo; WHFB and Gillespie's Drug Store, Benton Harbor-St. Joseph, and The Upjohn Company, Kalamazoo.

During the MCI, three Detroit service clubs took advantage of the opportunity to present a medical program for their members. MSMS President W. S. Jones, M.D., of Menominee, addressed the Civic Club; G. Thomas McKean, M.D., Detroit member of The Council of MSMS, the Downtown Lions Club, and Morris H. Marks, M.D., Detroit, the Zonta Club. Dr. Hull and Bradley M. Harris, M.D., MSMS Councilor from Ypsilanti, appeared on the "Court of Health" television program over WJBK-TV preceding the MCI.

News interest in the 1956 MCI exceeded that of any of its nine predecessors, and the scientific program received wide coverage not only by Detroit and Michigan newspapers, but by national news services and several medical publications. News reporting was coordinated and aided by a Press Relations Committee composed of A. B. Gwinn, M.D., Hastings, Chairman; H. F. Dibble, M.D., Detroit; Ralph W. Shook, M.D., Kalamazoo, and Arch Walls M.D., Detroit. Illness prevented the veteran Chairman of the MCI Press Relations Committee, C. L. Weston, M.D., of Owosso, from attending.

To aid smooth operation of the program and add to the hospitality, each of the guest lecturers and honorees was assigned an MSMS member as his "ubiquitous host."

Organizations other than those already mentioned that played a strong part in the success of the 1956 MCI by serving as co-sponsors include: Michigan Heart Association, which provided six speakers for the heart and rheumatic fever program on March 8; Michigan Regional Committee on Trauma, American College of Surgeons, which supplied six speakers on the March 7 trauma and surgery program; Davis & Geck, Inc., who sponsored continuous color motion pictures; Wayne County Medical Society, the medical schools at Wayne University and University of Michigan, Michigan Department of Health, and Michigan Public Health Officers Association.

What They Thought of the 1956 MCI

Here are some comments excerpted from letters received at the MSMS Executive Office following the Tenth Annual Michigan Clinical Institute:

"We had a grand meeting, didn't we?"

* * *

". . . a most interesting and instructive program, as well as rational arrangements."

* * *

"I enjoyed participating in the program and thought that it went off very well, indeed."

* * *

"I was certainly amazed at the clockwork manner of efficiency and organization . . ."

* * *

"I enjoyed very much my . . . attendance at the meetings of the Michigan Clinical Institute."

* * *

". . . fine program. To me, it was interesting, as well as informative, with an appreciative and attentive audience."

* * *

"I consider it to be a privilege to have attended."

* * *

"We were delighted to have had the opportunity of participating. We only regretted that we could not remain for the entire session . . ."

* * *

"The reaction to . . . our paper has exceeded our fondest expectations. Besides distributing over 1,200 reprints at the meeting, our mail is loaded with inquiries concerning the methods we are using here at [name of hospital]. I feel certain from the tone of these letters that MSMS has again made another step forward in the prevention and treatment of illness through the 1956 Clinical Institute . . . may I thank you for having allowed us to be a part of this highly successful undertaking."

Albert C. Furstenberg, M.D.

He's Never Too Weary to Face a Crisis

Distinguished physician, educator, able administrator and indefatigable worker—this is Albert C. Furstenberg, M.D., as his friends and colleagues know him.

It is quite unnecessary to record in the Medical Journal the life history and many honors that have come to the Dean of the University of Michigan Medical School. These are adequately listed in the national biographies. Suffice it to say, he is a Michigan man in the full sense of the word. He was born and educated in the State and has progressed steadily in the University of Michigan from student to Dean of his School. His career as an administrator may be said to have begun in 1932 when he was recalled from a planned European trip to assume the responsibilities of head of his department, made vacant by the untimely death of his chief, R. Bishop Canfield, M.D. This must be one of the shortest foreign tours on record—three days.



About 1934, when it became necessary for the University to appoint a Dean of the Medical School to succeed Dr. G. Frederick Novy, it was called to the attention of the Board of Regents by a member of the Medical School faculty, that Dr. Furstenberg had long been a student of medical education. After careful investigation this information was confirmed, and he was chosen unanimously by the Board to guide the destinies of his School. That the appointment was a wise one is evidenced by the progress the School has made under his direction.

Teaching standards have been maintained, research has prospered and physical facilities have been increased. As Dean one of his major achievements has been the progress made in correcting the old error at Michigan of separating geographically the work of the clinical and pre-clinical years. This mistake, confirmed in 1923, by the placing of the present classroom building on the campus, far from the hospital, has been a handicap to students, and has tended to develop a schism in the staff. Through Dr. Furstenberg's efforts the faculty has been unified and the pre-clinical students brought closer to the hospitals. The conditions will not be satisfactory, however, until the new classroom building, now planned to be erected in proximity to the hospitals, has been erected.

One of his well-known characteristics, which often impresses and sometimes depresses the Dean's friends, is his tireless energy. He seems never too weary to face a crisis or to carry through a project. He even "relaxes" as strenuously on vacation as he labors at other times. Whether hunting, fishing, or riding a horse, it is difficult to keep up with him. He is an enthusiastic horseman and his daughters have often remarked, "If you want to ride with Dad you must be reconciled to having

(Continued on Page 613)

A. C. Furstenberg, M.D., is currently President of the American Academy of Ophthalmology and Otolaryngology. This is one in a series of personal sketches honoring MSMS members who head national medical organizations. Alexander G. Ruthven, Ph.D., the author, is President Emeritus of the University of Michigan.

Michigan Foundation for Medical and Health Education

PRESIDENT'S ANNUAL REPORT

By Earl I. Carr, M.D., *President*

This is the eleventh annual meeting of the Michigan Foundation for Medical and Health Education, Inc. With sadness and with a sense of great loss, we record the death, since the last annual meeting, of Trustee C. Stewart Baxter, whose devotion and contribution was continuously manifest and highly valued. Since its inception, the Foundation has also lost through death, the following trustees: Drs. Rollo H. Stevens, James D. Bruce and Roy D. McClure, and through retirement, Messrs. Earnest H. Fletcher and Harry G. Gault.

The various activities and sponsorships of past years have been continued through 1955. The officers have responded to many medical student requests, more often for counsel than for financial aid. At the present time, we have seven students with whom loans are in force, totaling in round figures the advancement of $10,000.00. One loan of $1,500.00 has been repaid.

During the year, a most commendable action was taken by the Ingham County Medical Society when, by unanimous vote, a grant of $6,000.00 was set aside for student aid to upper class medical student Ingham County residents who need supplemental financial aid, and the Society named the Michigan Foundation to administer the loans under the Foundation Student Loan Plan in every particular, except for the elimination of the requirement of rural area practice. Already one loan has been extended to a University of Michigan Junior. It is to be hoped that other county medical societies will follow suit. The membership is urged to publicize this way to utilize the Foundation.

Another innovation, which has substantial potentialities, we have chosen to call the LeFevre Plan. This provides for every doctor in Michigan to forward a check for $10.00 to the Foundation annually upon his birthday. Doctor William LeFevre, of Muskegon, proposed this plan in editorials published in the *Muskegon Bulletin* and in The Journal MSMS. Several checks for this amount and some for larger amounts have been received as a result of the proposal. A substantial annual income to the Foundation may accrue by this plan. We are asking doctors to link two ideas with birthdays, a check to the Foundation, a health audit for himself.

Much enthusiasm is expressed over the success of the ninth annual Rural Health Conference held in Kalamazoo, January 19 and 20, and again financially sponsored by this Foundation as has been done heretofore year after year. There has been reason for pride in the support of this important cause, each year with a broadened scope.

As usual, two lectures were financed in 1955. Dr. Alexander Brunschwig, of New York, addressed the Michigan Clinical Institute in March on "Surgical Treatment of Cancer of the Cervix that has Recurred after Radiation Therapy." A scroll was presented to Doctor Brunschwig, for which he showed and expressed much appreciation. The Andrew P. Biddle Lecture was delivered by Dr. Charles L. Anspach, President of Central Michigan College of Education, at the MSMS Annual Meeting in September on the subject, "Forever Sacred." Both addresses were outstanding.



Henry A. Luce, M.D.

Henry A. Luce, M.D., Detroit, Past President of the Michigan State Medical Society, who died on October 28, 1955, bequeathed the sum of $1,000 to the Michigan Foundation for Medical and Health Education, earmarked for psychiatric research and study.

During his lifetime, Dr. Luce was active in the work of the Michigan Foundation, being one of its original members.

Besides the $6,000.00 grant heretofore described and available and to be withdrawn as needed for the earmarked and designated purpose, other contributions have come in, ranging from $10.00 to $1,000 each. They aggregate over $2,000.00 The sale of a sizable block of General Motors rights was another contribution. The total resources of the Foundation increased in 1955 in the amount of $1,523.36, bringing the total to $114,709.01, after disbursements for activities of over $4,000.00, according to the CPA audit of December 24, 1955.

Increased activities of the Foundation are possible by increased support, which we are always pursuing and gradually securing.

SECRETARY'S ANNUAL REPORT TO THE MEMBERSHIP

The Secretary has executed the duties of his office according to the By-Laws and as provided in Robert's Rules of Order, pursuant to the instructions of the members of the Board of Trustees, under the continued guidance of President Carr and of Treasurer Gardner, to whom the Secretary again expresses gratitude and appreciation.

On September 8, 1955, the Woman's Auxiliary to the Wayne County Medical Society voted to contribute $1,000 to the Student Loan Fund, with certain

(Continued on Page 611)

"How to look at a doctor's bill" could well serve as the title for recent Parke-Davis advertisements on the cost of medical care. For they suggest to the public new ways of looking at the extraordinary *value* one buys with each dollar spent for prompt and proper medical care.

These Parke-Davis messages talk in everyday language about familiar but "forgotten" facts. Some examples: the steadily decreasing cost of curing diseases such as pneumonia, the phenomenal reduction in the death-rate for children, the substantial savings in time and income because of the shortened duration of hospital stays.

By highlighting the heartening facts of medical progress in relation to the cost of medical care, this new series hopes to help in creating a healthy, realistic public opinion on the reasonableness of medical costs.

To do this successfully, we wish the facts to have the widest possible readership. Therefore these advertisements are being published regularly in such mass-circulation magazines as LIFE, the SATURDAY EVENING POST, and TODAY'S HEALTH.

If you would like to have folder-size reprints of any of these ads for your reception room, we will be happy to supply them on request.





PARKE, DAVIS & COMPANY

Detroit 32, Michigan

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

COMMON LAW MARRIAGES OUTLAWED IN MICHIGAN

As a result of a law passed at this session of the Michigan Legislature and signed by the Governor, common law marriages contracted in Michigan after January 1, 1957, will not be recognized. With the passage in 1937 of the premarital blood test law, a blood test became mandatory for the issuance of a marriage license. This automatically invalidated many new common law marriages.

DRUGS AND TB

Physicians are urged not to let an attractive blue and gray booklet mailed them recently go unread in the spring rush. "Drugs in the Treatment of Tuberculosis," issued by the Michigan Joint State Committee on Tuberculosis, sums up in its few, brief pages the current thinking in this vital area of tuberculosis control. The Joint State Committee, made up of the TB Control Committee of the Michigan State Medical Society, the Michigan Sanatorium Superintendents Association, The Michigan Sanatorium Commission, the Michigan Health Officers Association, the Michigan Tuberculosis Association and the Michigan Department of Health, is a group uniquely qualified to speak on this important subject.

APROPOS OF FLUORIDATION

Three publications are now available from the state health department for use in community campaigns promoting water fluoridation. "Bright Smiles" presents the Grand Rapids experience in fluoridating its water supply as an effective way of fighting tooth decay in children. "Wonderful Water" is a companion folder that sums up the answers to claims made by opponents of fluoridation. "The Facts About Fluoridation" is a single sheet condensation of "Wonderful Water," prepared for very general distribution. All three publications will be furnished in quantity to any community in which fluoridation is being considered.

NEW VISION FILM FOR LOAN

"Magic in the Seeing," a new 11-minute, black and white, sound motion picture on vision produced by the Michigan Department of Health, is now available for loan from the department's film loan library.

Filming was done last summer at Central Michigan College, Mt. Pleasant, with the elementary school boys and girls as willing actors. The film shows the purposes and general plan of a community vision program for school children, the co-operative action involved, the techniques employed in screening with the Massachusetts Vision Test equipment, the follow-up examination as indicated, and the fitting of glasses.

The film is intended for parent groups in communities where vision programs are in preparation or progress. It has received favorable comment from a number of professional groups both within and outside the state for its clarity, simplicity and human interest.

A companion motion picture on hearing conservation is now in production in the department, with some of the filming done and the script outlined.

FILM LOAN SERVICE POPULAR

The department's loan library of motion picture films, film strips and slides set up in 1941 has grown steadily in response to community demands and is now a well known and appreciated educational service. The film loan catalogue lists nearly 600 prints of motion picture films, and the addition of film strips and slides brings the number of items close to 1,000. Titles number 331, ranging over the whole complex field of public health. Most of the films are sound and many of them are color.

Checking films out to borrowers and in for inspection and repair after use was at first done at odd times by the photographer and darkroom technician. It is now the full-time job of a clerk.

The usefulness of the loan service is shown by the annual report of the visual education unit for the year ended June 30, 1955. Loans totalled 5,881, showings reached 12,742 and attendance was reported as 517,592. This year's totals will be even higher.

Kinescope recordings of live television shows put on by the department over WKAR-TV will become a feature of the loan collection beginning in September, 1956. By that time, a new color motion picture film produced by the department will be added to the list, "Vacation-bound!" It shows the resort inspection service tied in with the HDA, Health Department Approved, signs now an accepted part of Michigan's highway guides.

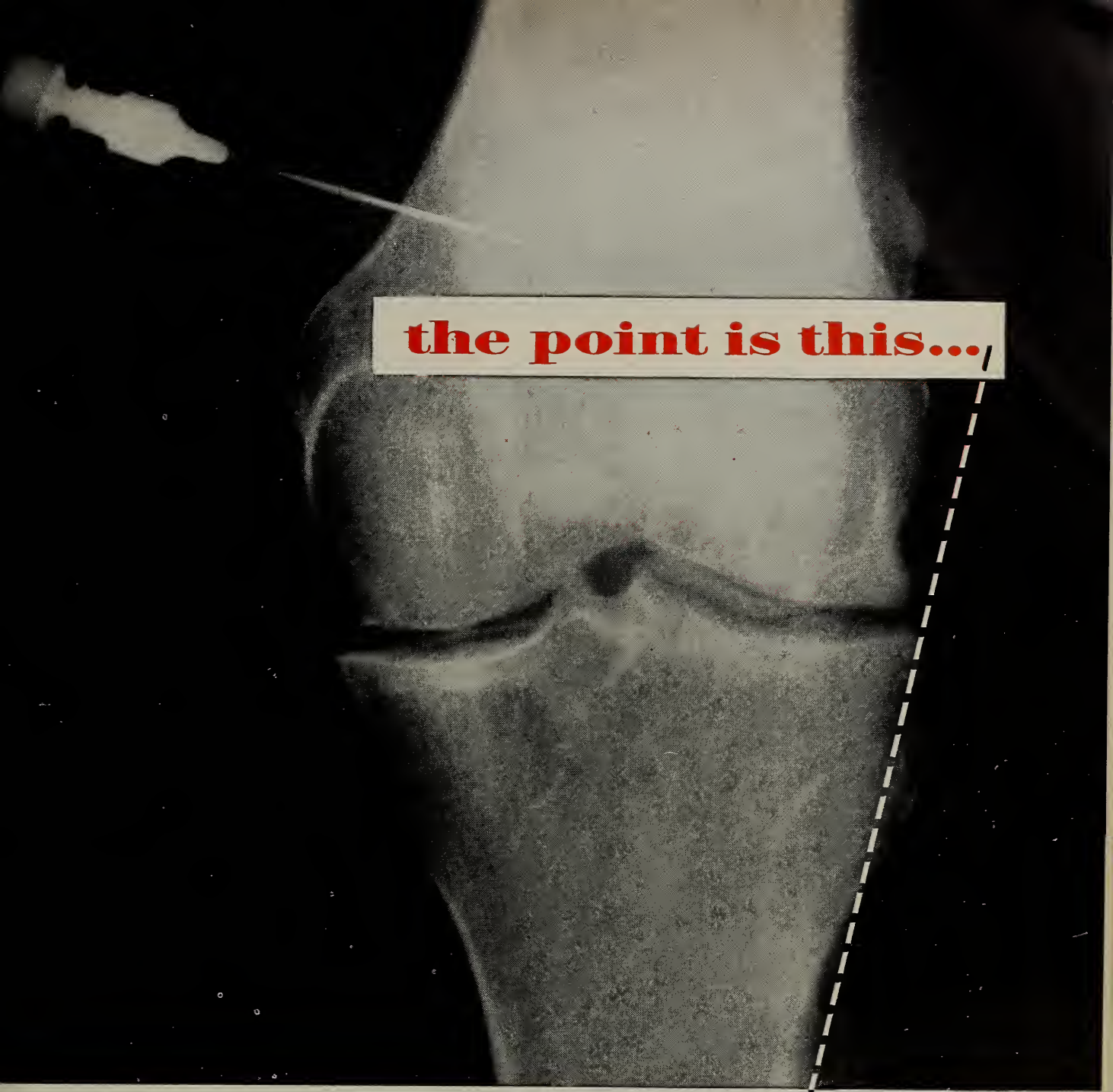
"THE CHILD WITH RHEUMATIC FEVER"

A new booklet, "The Child with Rheumatic Fever," issued by the Children's Bureau, is available from the maternal and child health section of the department. Written especially for parents, the booklet stresses the importance of prompt medical care, precautions after the active signs of the disease have gone, and use of community resources for education and vocational training for the child suffering heart damage.

Getting a woman to admit she is forty is certainly a difficult task; but this accomplished, getting her to come in for regular pelvic examinations should be simple!

* * *

The over-all five-year survival rate for ovarian tumors is around 15 per cent.



HydroCortone® -T B A

(HYDROCORTISONE TERTIARY-BUTYLACETATE, MERCK)

gives the arthritic patient more days of freedom from joint symptoms—in many patients the anti-rheumatic effect persists 2 to 10 times longer than after injection of hydrocortisone acetate. Its action is local and without systemic effect.

SHARP & DOHME

Philadelphia 1, Pa.
DIVISION OF MERCK & CO., INC.

SUPPLIED: SALINE SUSPENSION HYDROCORTONE-TBA—25 MG./CC., VIALS OF 5 CC.



. NEWS MEDICAL

MICHIGAN AUTHORS

E. L. Quinn, M.D., J. M. Colville, M.D., and **Frank Cox, Jr., M.D.,** all of Detroit, are authors of an original article, "Phenoxymethyl Penicillin (Penicillin V) Therapy of Subacute Bacterial Endocarditis," which appeared in *JAMA* of March 17, page 931.

J. T. Ferguson, M.D., and **W. H. Funderburk, Ph.D.,** Traverse City, are authors of an original article, "Improving Senile Behavior with Reserpine and Ritalin," which appeared in *JAMA* of January 28, page 259.

H. H. Stryker, M.D., Kalamazoo, is the author of an article, "Safe Traction in Children with Fractured Femurs," which appeared in *JAMA* of February 4, page 388.

Frederick A. Coller, M.D., Ann Arbor, is the author of an article entitled "Cancer of the Colon and Rectum: Concepts of Treatment," published in the *University of Michigan Medical Bulletin,* November, 1955.

Leo G. Nutini, Carl M. Morgan, Cincinnati, and **Albert H. Wheeler, Yuko Nakamura,** and **Reuben L. Kahn,** Ann Arbor, are the authors of an article entitled "The Universal Serologic Reaction in Brown-Pearce Carcinoma," published in the *University of Michigan Medical Bulletin,* November, 1956.

Fred Holtz, M.D., Ann Arbor, is the author of an article entitled "Renal-Adrenal Heterotopia: Case Report and Review of the Literature," published in the *University of Michigan Medical Bulletin,* December, 1955.

G. H. Lawrence, M.D., Ann Arbor, is the author of an article entitled "Left Heart Catheterization: Indications and Interpretations" published in the *University of Michigan Medical Bulletin,* December, 1955.

Henry H. Swain, M.D., Ann Arbor, is the author of an article entitled "A Direct-Writing Flowmeter," published in the *University of Michigan Medical Bulletin,* December, 1955.

L. Douglas MacRae, M.D., Bay City, is the author of an article entitled "The Regulation of Dicumarol Dosage by Special Venous Clotting Techniques," published in the *American Practitioner and Digest of Treatment,* January, 1956.

Sylvester J. O'Connor, M.D., Ann Arbor, is the author of an article entitled "Osteochondritis of the Accessory Tarsal Navicular Bone," published in the *University of Michigan Medical Bulletin,* January, 1956.

James E. C. Walker, M.D., Ann Arbor, is the author of an article entitled "Certain Concepts of Clubbing of the Digits," presented at the Regional Meeting of the American Federation of Clinical Research in Detroit, March, 1955, and published in the *University of Michigan Medical Bulletin,* January, 1956.

Carol E. Goodman, M.D., Alma J. Murphy, Ph.D., and **James W. Rae, Jr., M.D.,** Ann Arbor, Michigan, are the authors of an article entitled "Tissue Temperatures Produced by the Application of Moist Air," read at the Thirty-third Annual Session of the American Congress of Physical Medicine and Rehabilitation, Detroit, August, 1955, and published in the *Archives of Physical Medicine and Rehabilitation,* January, 1956.

Manos A. Petrohelos, M.D., and **J. Reimer Wolter, M.D.,** Ann Arbor, are the authors of an article entitled "Necroscleritis Nodosa," published in the AMA *Archives of Ophthalmology,* February, 1956.

Robert J. Meade, M.D., F.A.C.S., D.A.B., and **William H. Meade, M.D., F.A.C.S.,** Lansing, are the authors of an article entitled "Treatment of Aneurysms with Dermal Grafts" read at the Twentieth Annual Congress of the United States and Canadian Sections, International College of Surgeons, Philadelphia, September, 1955, and published in the *Journal of the International College of Surgeons,* February, 1956.

J. Reimer Wolter, M.D., Thomas Stratford, M.D., and **E. Richard Harrell, M.D.,** Ann Arbor, are the authors of an article entitled "Cast-like Fungus Obstruction of the Nasolacrimal Duct," published in the AMA *Archives of Ophthalmology,* March, 1956.

Carl F. List, M.D., Grand Rapids, is the author of an article entitled "Disturbances of Eye Movements as a Neurologic Problem." published in the *New England Journal of Medicine,* March 8, 1956.

Thomas Francis, Jr., M.D., Ann Arbor, is the author of an article entitled "Virus Problems in Medicine" published in the *Illinois Medical Journal,* November, 1955, and digested in *Ophthalmology and Otolaryngology,* February, 1956.

K. A. Platt, M.D., M. W. Reynolds, M.D., Denver, and **A. J. Neerken, M.D.,** Kalamazoo, are the authors of an article entitled "Coarctation of the Aorta and Pregnancy," published in the *Rocky Mountain Medical Journal,* March, 1956.

Edward L. Quinn, M.D., James M. Colville, M.D., Frank Cox, Jr., M.D., and **Joseph Truant, Ph.D.,** Detroit, are the authors of an article entitled "Phenoxymethyl Penicillin (Penicillin V) Therapy of Subacute Bacterial Endocarditis," published in the *Journal of the American Medical Association,* March 17, 1956.

Edmond L. Cooper, M.D., Detroit, is the author of an article entitled "Muscle Surgery and Orthoptics," read at the annual joint meeting of the American Orthoptic Council and the American Association of Orthoptic Technicians, September, 1954, New York,

(Continued on Page 594)

Meat...

and the Rehabilitation of Protein Depleted Patients

Although the recommended daily allowance of one gram of protein per kilogram of body weight is adequate for the average healthy adult,[1] greater amounts may be needed in the rehabilitation of patients depleted in protein after severe infections, mechanical trauma, burns, or extensive surgery.[2] Protein needs for tissue regeneration during convalescence are high.

To speed rehabilitation of the protein depleted patient, top quality protein and calories should be given in generous quantity.[2] However, a high protein intake, 130 grams daily, at best induces a slow response.[3] Intakes at 3 or 4 times that level may produce considerably more rapid gain in weight, strength, and morale.[4,5] If mastication and swallowing are difficult, canned strained meats—such as used in infant feeding—may be used to advantage in the high protein diet.[2]

Lean meat, outstanding in contained top quality protein, may well be made the keystone of the high protein diet. Its abundance of vitamin B complex and essential minerals—iron, phosphorus, potassium, and magnesium—adds to its therapeutic value. Important also are its appetite appeal, its easy digestibility, and its virtual freedom from allergenic properties.

1. Recommended Dietary Allowances, Washington, D. C., National Academy of Sciences—National Research Council, Publication 302, 1953.
2. Co Tui: Review: The Fundamentals of Clinical Proteinology, J. Clin. Nutrition *1*:232 (Mar.-Apr.) 1953.
3. Keys, A.; Brozek, J.; Henschel, A.; Mickelsen, O., and Taylor, H. L.: The Biology of Human Starvation, Minneapolis, Univ. of Minnesota Press, 1950.
4. Burger, G. C. E.; Drummond, J. C., and Sandstead, H. R.: Malnutrition and Starvation in Western Netherlands, The Hague General State Printing Office, 1948, Part II, p. 91.
5. Co Tui; Kuo, N.H.; Chuachiaco, M., and Mulholland, J.H.: The Protein Depletion (Hypoproteinia) Syndrome and Its Response to Hyper-Proteinization, Anesth. & Analg. *28*:1 (Jan.-Feb.) 1949.

The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

American Meat Institute
Main Office, Chicago... Members Throughout the United States

(Continued from Page 592)

and published in the *American Orthoptic Journal*, Volume 5, 1955.

Harold E. Bowman, M.D., and **Herman Pinkus, M.D.**, Grand Rapids, are the authors of an article entitled "Keratoacanthoma (Molluscum Sebaceum)" published in the *Archives of Dermatology and Syphilogy*, July. 1955, and condensed in the *American Practitioner and Digest of Treatment*, February, 1956.

James W. Rae, Jr., M.D., and **Leonard F. Benderz, M.D.**, Ann Arbor, are the authors of an article entitled "Treatment of Patients with Rheumatoid Arthritis by Physical Means," read before the Section on Physical Medicine and Rehabilitation at the 104th Annual Meeting of the American Medical Association, Atlantic City, June 8, 1955, and published in the *Journal of the American Medical Association*, February 25, 1956.

H. G. Kobrack, M.D., Ph.D., Detroit, is the author of an article entitled "Pathology and Audiology of Middle Ear Lesions," published in the AMA *Archives of Otolaryngology*, February, 1956.

* * *

The Second Clinical Research Symposium is to be held at Northville State Hospital on June 6, 1956. The topic will be "Atropine Toxicity Therapy." The moderator will be Philip N. Brown, M.D., Superintendent, Northville State Hospital. A number of papers will be presented, and the day will close with discussion groups in the following areas: Research, Clinical Application, and Private Practice, to be led by Dr. Gordon L. Forrer, Clinical Director, Northville State Hospital; Dr. Jacob Miller, Chief, Intensive Treatment Unit, Northville State Hospital; and Dr. Richard D. Goldner, Saginaw, Michigan.

* * *

At the American Goiter Association meeting held at the Drake Hotel in Chicago on May 3, 4, and 5, two of the thirty-nine papers presented during the session, were by Michigan men. **D. R. Korst, N. S. Hiramoto** and **W. H. Beierwaltes**, Ann Arbor, presented a paper on "Rise in Basal Metabolic Rate and Fall in Protein-Bound Iodine Induced by Epinephrine" and **J. M. Miller, M. A. Block** and **B. E. Brush**, Detroit, on "The Selection of Patients for Thyroid Surgery.'

* * *

The Pan American Sanitary Bureau of the World Health Organization purchased nineteen iron lungs which were flown on March 14 to Buenos Aires by the Military Air Transport Service. The latest report from the Argentine Government lists 1310 cases of poliomyelitis with 120 deaths in Argentina between January 1 and March 12.

On March 6, the Pan American Sanitary Bureau pur-

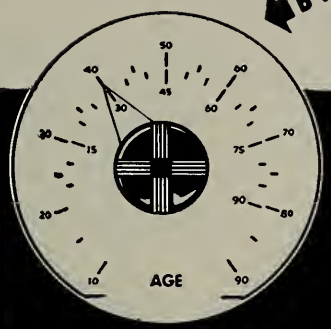
(Continued on Page 596)



WE'VE GREATLY *Simplified* IT FOR YOU, DOCTOR . . .

BY SETTING THESE DIALS

AND PRESSING THIS BUTTON







ALL DIALS: MALE—Outer scale; FEMALE—Inner scale

THE L-F BASALMETER

Self-Calculating

Basal Metabolism Apparatus

With this new, efficient BMR apparatus, you put in *four* factors (age, height, weight and sex) and the patient puts in the *fifth*—the time factor. The BasalMeteR computes these factors electrically and gives you an accurate basal metabolic rate.

THERE ARE NO CHARTS, NO GRAPHS, NO SLIDE RULES, NO "WHEEL" CALCULATORS, NO CONVERSIONS, NO HEAVY OXYGEN TANKS!

L-F



YOU READ THE BM RATE RIGHT HERE



Here is a long-awaited, long-needed simplification in metabolism test apparatus! No "wondering" about human error with the BasalMeteR. At conclusion of the test, you press a button and read the result in terms of a plus or minus in percentage of normal. It's as simple as that, and just as reliable. Find out now, without obligation, about this newer, better BMR unit!

MAIL THIS COUPON *Today!*

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Gentlemen: Please send me, without obligation, your 6-page brochure describing the new L-F BasalMeteR.

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for modern
control of
salt retention
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CUMERTILIN®
(Brand of Mercumatilin, Endo)
Tablets

- effective **oral** diuretic with no significant gastrointestinal irritation[1]
- Suitable for long-term maintenance therapy.
- eliminates need for injections in certain cases, lengthens interval between injections in others
- basically **different** in chemical structure, extending the therapeutic choice in organic mercurials

DOSAGE: 1 to 3 tablets daily as required.

SUPPLIED: As orange tablets, in bottles of 100 and 1000. Also available—

CUMERTILIN Sodium Injection, 1- and 2-cc. ampuls, in boxes of 12, 25, and 100; and 10-cc. vials, individually and in boxes of 10 and 100.

1. Pollock, B. E., and Pruitt, F. W.: Am. J. M. Sc., 226:172, 1953.

THE G. A. INGRAM COMPANY
4444 Woodward Avenue, Detroit 1, Mich.

(Continued from Page 594)

chased twenty-one iron lungs which were flown to Argentine by U. S. Air Force plane and in use two hours later. In addition to this, the National Foundation for Infantile Paralysis is also supplying equipment, including infant, juvenile and portable iron lungs and several rocking beds.

* * *

Debt of Surgery to Roentgenology.—In an editorial in the February, 1956, *American Journal of Roentgenology, Radium Therapy and Nuclear Medicine,* Frederick A. Coller. M.D.. Ann Arbor, traced the growth of surgery and the discovery of x-ray.

"Anesthesia and antisepsis . . . were necessary, fundamental techniques, but surgery could not enlarge its scope . . . without clear cut objectives demonstrated by this startling new discovery. . . . The great advances in surgery in recent years have come from the laboratory to the clinic. The radiologist has played an important part in all these advances . . . he has been a fruitful and stimulating companion travelling with us on all roads to solid achievements."

* * *

The article entitled "Health Requires Endless Search for Human Talent" by **A. C. Furstenberg, M.D.,** Dean of the University of Michigan Medical School, published in the February issue of THE JOURNAL of the Michigan State Medical Society, was reprinted on the editorial page of *The Saginaw News,* March 16, 1956.

* * *

The Sixth International Congress on Otolaryngology will be held in Washington, D. C., on May 5 to 10, 1957. Elaborate plans are being made for a well rounded program, many international guests, and postgraduate opportunities. Registration and headquarters will be at the Statler. There will be three plenary sessions on Monday, Wednesday and Friday mornings; (1) Chronic Suppuration of the Temporal Bone; (2) Collagen Disorders of the Respiratory System; (3) Papilloma of the Larynx. There will be original papers and other presentations at the general sessions. The official languages will be English, French, German and Spanish. Three postconvention tours are being planned; seven, seventeen and twenty-one days. Administration office, 700 North Michigan Ave.. Chicago 11, Illinois.

The Sixth International Congress on Bronchoesophagology will be held in Philadelphia, May 2 and 13, 1957. Chevalier Jackson in charge.

The International Congress on Audiology will be at St. Louis, Mo., May 14, 15 and 16, 1957, with Richard Silverman, Ph.D., 818 So. Kingshighway in charge.

The International Voice Conference will be in Chicago, May 20, 21 and 22, 1957. Hans von Leden, M.D., 30 No. Michigan, Chicago, in charge.

* * *

American Board of Obstetrics and Gynecology.—Applications for certification (American Board of Obstetrics and Gynecology) for the 1957 Part I Examinations are now being accepted. Candidates are urged to make

(Continued on Page 598)

DOCTORS EVERYWHERE NOW KNOW WHY

Viceroys Are Smoother



Professional men who have studied the microscopic analysis of the Viceroy filter now know why the Viceroy taste is smoother—never rough. Only Viceroy has 20,000 tiny filters in every tip—twice as many filters as the other two largest-selling filter brands. That is why Viceroys are smoother by far—never, never rough. That is why so many doctors now smoke and recommend Viceroys.

Yes, smoother taste because there are

TWICE AS MANY FILTERS IN EVERY VICEROY TIP

as the other two largest-selling filter brands!





Viceroy's exclusive filter is made from pure cellulose—soft, snow-white, natural!

(Continued from Page 596)

such application at the earliest possible date. Deadline date for receipt of applications is October 1, 1956.

All candidates for admission to the Examinations are required to submit with their application, a plain typewritten list of all patients admitted to the hospitals where they practice, for the year preceding their application or the year prior to their request for reopening of their application.

Application for re-examination, as well as requests for resubmission of case abstracts, must be made to the Secretary prior to October 1, 1956.

Current bulletins outlining present requirements may be obtained by writing to the Secretary's office: Robert L. Faulkner, M.D., 2105 Adelbert Road, Cleveland 6, Ohio.

* * *

Atomic energy is being used well, but not to the utmost, in medicine today. Its optimal employment calls for training of greater numbers of doctors, nurses and technicians; equipment of more hospitals and medical schools with facilities for handling radioisotopes, and improvement in exchange of atomedical information. These are among conclusions of a citizens' advisory panel whose report, based on a 10-month study, was published recently by Congress' Joint Committee on Atomic Energy. Nine-member panel was headed by Robert McKinney, New Mexico publisher.

"The strides made by the United States in atomic development in the medical and public health field create an obligation to utilize this new knowledge to the utmost for the benefit of our own people," said the report. But it states that only 870 hospitals and medical clinics out of 6,970 are using radioisotopes in research, therapy or diagnosis; 35 out of 80 medical schools polled give no training in clinical use of radioisotopes. How to finance improvements the panel did not say, but it counseled that "medical institutions and research centers should not assume a passive role and expect the government . . . to assume all or even a major portion of the responsibility for providing research facilities, equipment and materials."

Government does have a responsibility, along with industrial and civic groups, said the report, in alleviating shortage of physicians, nurses and technicians: "No young man or woman who has the capacity and desire to enter the medical, nursing or medical research professions . . . should be turned away for want of faculties, facilities or funds."—*Washington Report on Medical Sciences.*

* * *

The National Medical Civil Defense Conference, sponsored annually by the AMA Council on National Defense, has been scheduled for Saturday, June 9, at the Palmer House, Chicago—just prior to the opening of the annual AMA convention.

Previous conferences have been held in Atlantic City,

(Continued on Page 600)





Assurance...

Your most fastidious patient will not hesitate to use this dainty, feminine, yet medically proven specific for vulvo-vaginal infections. Clinically effective in Leukorrhea, Trichomonas and Monilia vaginitis.

Vagimine

VAGINAL INSERTS

Combines 5 gentle but potent anti-microbial agents in buffered, lactose-dextrose base assuring proper pH. Your patient has the *assurance* of *prompt*, effective relief at moderate cost ...You have the *assurance* she will use them as prescribed.

Vagimine Inserts contain:

Phenyl mercuric acetate	3.5 mg.	Tyrothricin	0.5 mg.
9-aminoacridine hydrochloride	2.0 mg.	Hyamin 10X	2.0 mg.
Methyl para hydroxybenzoate	7.0 mg.	Succinic acid	15.0 mg.

Buffered Lactose-Dextrose base q. s.

Literature and Sample on request

TUTAG

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19180 MT. ELLIOTT AVENUE
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Gastralme

the creamy antacid

WORKS IN SECONDS
PROTECTS FOR HOURS

Superior Buffering Capacity

Gastralme stands out in comparison with other products. In a recent test Gastralme neutralized the acid within 5 minutes and a pH of 6.4-7.1 was maintained for 120 minutes. After 150 minutes, the Gastralme mixture continued to show a pH of 5.2, and it was 180 minutes before the pH dropped to 2.9.

For treatment of
Peptic Ulcer
and control of
Gastric Hyperacidity

Literature and clinical samples available on request . . .

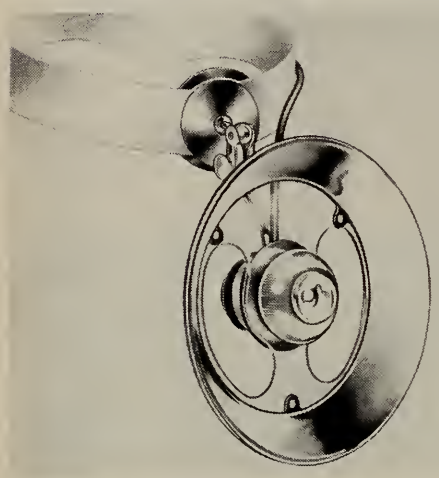
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16361 Mack Avenue • Detroit 24, Michigan



No. 460

WELCH ALLYN

HEADLIGHTS



No. 450

May we suggest that you check *both* Welch Allyn types before you purchase your next headlight?

No. 460 is a superior, direct, focusing light, favored for its combination of great intensity with freedom from filament shadows and other imperfections in the light beam. Focuses down to a 1/2" spot at 8" focal length or up to 6 1/2" at 13" focal length. Complete with transformer, $28.00.

No. 450 is the unique Full Beam headlight, which provides an intense light covering a large area evenly without glare or specular reflection. Binocular vision through the beam preserves normal depth perception and eliminated visible shadows. Complete with transformer, $36.00.

NOBLE-BLACKMER, INC.

267 W. Michigan **28148**

Jackson, Michigan

(Continued from Page 598)

San Francisco, New York, and Chicago. Last year's meeting in Atlantic City featured the subject of radioactive fall-out. Outstanding medical speakers discussed radiological defense measures and the effects of residual radiation.

While plans for this year's program have not yet been completed, Executive Secretary Frank A. Barton said every effort is being made to prepare a program that will be both interesting and informative. The program committee, now at work consists of Drs. Harold C. Lueth, Evanston, Illinois; Reuben A. Benson, Bremerton, Washington, and Max L. Lichter, Detroit.

Physicians who plan to attend the annual AMA meeting are urged to come a day or two earlier and attend the civil defense session. Inquiries may be directed to the council office at AMA headquarters.—*AMA Secretary's Letter.*

* * *

The British Ministry of Health reports that about 3,750,000 persons (roughly one-sixth of the working population) are enrolled in private health insurance plans, despite the national health insurance program. With dependents, the number of persons covered by private plans is about 10,000,000 or about one fifth of the entire population.—*Blue Shield News Letter.*

* * *

Michigan Hospital Service, in 1955, paid for hospitals $84.043,847, making a total for all the years of operation, $425,599,088. The operating expense last year was 3.99 per cent. There were 392,750 sick and injured Blue Cross patients and 107,592 newborn babies and their mothers. Michigan Hospital Service paid for its people over half a million hospital bills, one out of nine persons carrying protection.

* * *

Veterans Care.—When administering to veterans with service-connected disabilities, be sure you have proper authorization before being responsible for *any* expense. The Veterans Administration and veterans organizations have fixed procedures to solve these problems. If not followed, recompense is a matter of long delay, or may be denied.

* * *

Five members of the Kalamazoo Academy of Medicine met at the Civic Auditorium, March 12, 1956, to inaugurate the first free medical forum of the district. Sponsored by the *Kalamazoo Gazette* and the Kalamazoo Academy of Medicine, the forum is open to the public at no charge. Questions are to be submitted on coupons printed in the *Gazette.* No questions will be answered from the floor but a discussion may follow. No limit is placed on the number of questions.

* * *

The Kalamazoo Academy of Medicine has made an official statement in which it suggested that the establishment of a third medical school in Michigan would be unwise until existing schools, particularly Wayne University Medical School, have been expanded to the greatest practical degree.

(Continued on Page 602)



Trasentine®-Phenobarbital

integrated relief . . .
mild sedation
visceral spasmolysis
mucosal analgesia

TABLETS *(yellow, coated), each containing 50 mg. Trasentine® hydrochloride (adiphenine hydrochloride CIBA) and 20 mg. phenobarbital.*

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Summit, N. J.

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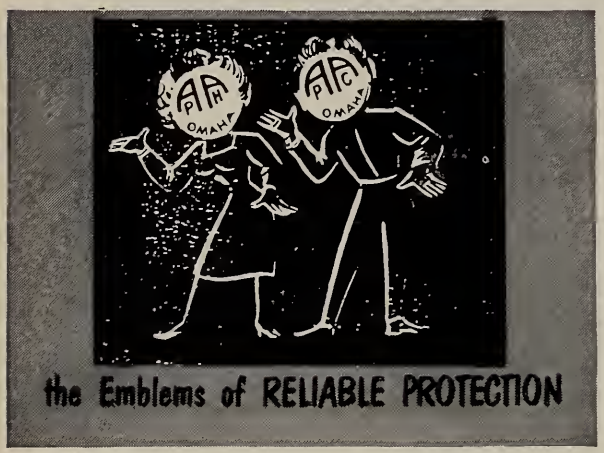
Under direction of Daughters of Charity of St. Vincent de Paul

Newly reorganized and modernized for individualized care and treatment of the nervous and mentally ill and alcoholic.

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Medical Superintendent

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(Continued from Page 600)

The statement, signed by Dr. Don Marshall and approved unanimously by the Academy, was issued in reply to a request for the Academy's position on the establishment of a third medical school somewhere in western Michigan. The request came from the Kamalazoo Chamber of Commerce as a result of the recent formation of a committee designed to study the possibility of locating the proposed school in Kalamazoo.

The complete statement follows:

"The Kalamazoo Academy of Medicine supports a study of the desirability, for the community, of someday establishing a medical school in this city. Considering the needs of the entire state, the Academy believes that it would be unwise to establish a third medical school in Michigan until the existing schools, particularly the Wayne University Medical School, have been expanded and augmented to the greatest practical degree. If future growth of population requires the establishment of a third medical school, and state authorities then decide that it should be in Western Michigian, the Academy feels that it would be entirely logical to locate it in Kalamazoo."

* * *

Medical Licensure. — There are twenty-one basic science boards in the United States. A report issued recently shows that the Michigan Board has examined 719 applicants, and has passed 542. This is not too far from the national average: 4,815 examined, and 3,941 passed.

National licensure for 1954 shows there were 7,917 new doctors of medicine and 3,667 died, making a gain of 4,250 during the year. The total number of licenses issued was 15,029. Of these 6,827 were by examination and 8,202 were by reciprocity, that is, transferred from other states, or boards. In Michigan, 440 persons were licensed (233 on examination and 207 by other boards) and accepted in 1954.

* * *

Since its inception in 1939, Michigan Medical Service has paid for services to its subscribers $172.071.543.53. There were 5,077,161 services paid for at an average of $33.89 per service.

* * *

A three-day anesthesiology conference designed for doctors in general practice and part-time anesthetists was held April 26, 27 and 28 sponsored by Wayne University's College of Medicine and Detroit Receiving Hospital.

The conference dealt with problems in choice of anesthesia, management, post-anesthetic complications. Cases dealing with specific problems were presented and discussed.

Four anesthesiology specialists from Virginia, New York and Michigan joined the Wayne medical school faculty in presenting latest developments and techniques in the field.

Guest speakers were Dr. D. W. Eastwood, professor of Anesthesiology, University of Virginia Medical School; Dr. M. H. Harmel, professor of Anesthesiology, State University of New York College of Medicine; Dr. L. Lewis, assistant professor of Anesthesiology, University of Michigan; and Dr. P. R. Dumke, director of Anesthesiology, Henry Ford Hospital.

The Michigan Electroencephalographic Society has been organized with its membership open to all persons in Michigan actively engaged or interested in encephalography and/or its allied sciences. The first meeting of the Society was held April 6 at the Lafayette Clinic in Detroit. Speakers were John Churchill, M.D., Detroit, on "Continuous Petit Mal Epilepsy"; Peter Beckett, M.D., Detroit, on "A Study of the Relationship between the EEG and the Various Aspects of Mental Deficiency." Garfield Tourney, M.D., Detroit, on "The Electrophysiology of Emotion."

The scientific program was followed by a business meeting, with election of officers and adoption of constitution and by-laws.

* * *

The Hawaiian Medical Society is celebrating its Centennial Anniversary in Honolulu the week of April 22, 1956. Special scientific programs during the week have been devised for the members of the Hawaiian Medical Society and their guests throughout the world.

The Michigan State Medical Society salutes the Hawaiian Medical Society on its achievements during the past 100 years.

* * *

"Best sellers" are two small folders containing reprints of Parke, Davis and Company advertisements on the cost of medical care.

Requests from doctors of medicine and pharmacists, to the total of 1,550,000 copies of the first folder: "Concerning one of the biggest bargains of your life . . ."; and for more than 500,000 copies of the second: "How much does it cost to keep him well today?" prove that the public is interested in good medical care—in keeping well—and in longer life.

A third folder: "The lady buys a bargain" is now being prepared by Parke, Davis. The indications are it will join the PD list of "best sellers."

* * *

President W. S. Jones, M.D., addressed the Jackson County Medical Society, April 17, on the topic, "Seventeen for You—Take Your Pick!" Dr. Jones also spoke to the Genesee County Medical Society in Flint on May 17, and will speak to the Gratiot-Isabella-Clare County Medical Society at Mt. Pleasant on May 29.

* * *

Leon DeVel, M.D., Grand Rapids, Medical Coordinator for the MSMS Rheumatic Fever Control Program, addressed the Marshall Health Council of Marshall, Michigan, on February 15. He talked to the Cadillac Rotary Club in Cadillac on February 21, and to the International Council on Exceptional Children in Battle Creek on March 10.

In Manistee, Dr. DeVel spoke to the Lay Health Committee on March 13; to the Leonard PTA in Grand Rapids on March 15, to the Ludington Health Committee of Ludington on April 2; and to the Monroe County Medical Society on April 3.

Dr. DeVel's topic was "Rheumatic Fever Control—What's Your Problem?"

* * *

Fred C. Swartz, M.D., Lansing, who has been ap-

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pointed a member of the AMA Geriatrics Committee, attended its meeting in Philadelphia March 19-20.

Congratulations, Dr. Swartz!

* * *

The Michigan Chapter, American College of Surgeons, held an all-day meeting in Detroit coincident with the Michigan Clinical Institute, on March 6. Speakers included: M. O. Cantor, M.D., Homer M. Smathers, M.D., Ward M. Smathers, M.D., E. B. Miller, M.D., G. Peter Halekas, M.D., C. Paul Hodgkinson, MD., I. A. Swinehart, M.D., Howard P. Doub, M.D., A. H. Veldhuis, M.D., Lawrence Wm. Gardner, M.D., Wm. F. Dwyer, M.D., John J. Corbett, M.D., Harry C. Saltzstein, M.D., Howard Manz, M.D., Norman Swingle, M.D., John William Derr, M.D., John Reid Brown, M.D., D. Emerick Szalgyi, M.D., Roger F. Smith, M.D., Thomas Geoghegan, M.D., Charles Sergeant, M.D., Conrad R. Lam, M.D., John H. Whitcomb, M.D., P. W. Pifer, M.D., M. A. Block, M.D., Robert D. Larsen, M.D., Joseph L. Posch, M.D., Sydney K. Beigler, M.D., all of Detroit; James H. Beaton, M.D., Grand Rapids; Wm. C. Baum, M.D., Ralph Straffon, M.D., and Joe D. Morrison, M.D., Ann Arbor; and H. Mortimer Bishop, M.D., Saginaw.

The scientific sessions were followed by a reception and banquet, under the presidency of George J. Curry, M.D., Flint.

* * *

Alfred Jay Bollet, M.D., of Detroit, recently was appointed one of twenty-three Markle Scholars in Medical Science. Dr. Bollet will do research work in internal medicine at Wayne University College of Medicine, Detroit.

Congratulations, Dr. Bollet!

* * *

American Medical Education Foundation.—Nine hundred and one doctors of medicine in Michigan contributed a total of $45,896.49 to AMEF during 1955. This included 161 who sent $14.859.59 to AMEF direct and 740 M.D.'s who contributed $31,036.90 to specific medical schools of which they are alumni.

Michigan stood twelfth among the states in contributions.

* * *

Russell Kirk, in the *Wall Street Journal* of February 1, wrote an illuminating article entitled "Britain's State Medicine Poses Problems for Physicians—and for Nation's Health."

Quotable sentences include:

"Whatever is free tends to be held cheap."

"There are limits on how much any state can afford to spend simply on health-schemes."

"What has been adopted in Britain, and what is sometimes proposed in the United States, is a doctrinaire nineteenth-century solution, socialized medicine, to a problem the terms of which have altered immensely in the twentieth century. In a society of material abundance, state medicine is an obsolete answer."

(Continued on Page 606)

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We believe that Brighton Hospital offers the answer. Physicians can now send their alcoholic patients to Brighton with the certain assurance that they will find expert medical and nursing attention AND that, if they so desire, patients will be thoroughly indoctrinated with the program of Alcoholics Anonymous.

BRIGHTON HOSPITAL is NOT interested in the patient who merely wishes to be dried out in order to resume drinking. We ARE interested in those patients who really, fervently, seek complete rehabilitation and a way of life FREED from alcohol.

BRIGHTON HOSPITAL is owned and operated by MICHIGAN ALCOHOLIC REHABILITATION FOUNDATION, a non-profit organization devoted to the best possible hospitalization of the alcoholic who seeks to stop drinking.

DOCTORS, we are here to serve you. We are here to serve your patients.

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(Continued from Page 604)

New **Kinescopes** available for purchase or loan from the Michigan Division or Southeastern Michigan Division, American Cancer Society, include the following:

"Cancer of the Prostate," running 50 minutes, 2 reels (Program No. 3).

"Cancer of the Oral Cavity," 35 minutes, 1 reel (Program No. 11).

"Cancer of the Thyroid," 29 minutes, 1 reel (Program No. 12).

"Lymphomas and Leukemias," 55 minutes, 2 reels (Program No. 14).

"Cancer of the Urinary Bladder," 48 minutes, 2 reels (Program No. 23).

"Moles and Melanomas," 49 minutes, 2 reels (Program No. 25).

"The Psychological Aspects of Cancer," 39 minutes, 1 reel (Program No. 29).

For purchase or rental of above Kinescopes, write the Michigan Division, ACS, 21 Ottawa Avenue, N.W., Grand Rapids, or the Southeastern Michigan Division, ACS, 4811 John R., Detroit, Michigan.

* * *

The AMA's 105th Annual Session will be held in Chicago June 11-15, 1956. Headquarters for House of Delegates will be at the Palmer House; the exhibits and meetings will be at Navy Pier.

The Fourth International Congress on Diseases of the chest will be held in Cologne, Germany, August 19-23, 1956. For information, write American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

* * *

Did you know that one person in every seventy-five is diabetic?

* * *

The Fifth Annual Symposium for General Practitioners on Tuberculosis and other Chronic Pulmonary Disease will be held at Saranac Lake, New York, July 9-13 (approved for twenty-six hours of formal credit for members of AAGP).

For information and complete program, write Edward N. Packard, M.D., P.O. Box 262, Saranac Lake, New York.

* * *

Medical Aid Bill Backed.—The House Armed Services Committee Tuesday *approved a bill to provide Government-paid hospital and medical-care insurance for service men's families.*

The bill would not halt the present treatment of dependents in military facilities.

But Chairman Kilday (D., Tex.), of the subcommittee that worked out the new measures, said it would benefit especially an estimated 40 per cent of service families who now live too far from military facilities to be able to use them.—*Detroit Free Press,* February 22, 1956.



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Grace Hospital Reunion—Saturday, June 2, 1956.—The afternoon session will be held in Main Hospital from 1 to 5 o'clock and will include subject presentations, round tables, panel discussions, and exhibits.

In the evening physicians and their wives are invited to enjoy cocktails, dinner, and dancing at the Sheraton-Cadillac Hotel, from 7:30 to 1 o'clock. Tickets are $10 per person.

Please contact Robert E. Bogue, M.D., 15800 West McNichols Road, Detroit 35, for reservations.

* * *

The Upper Peninsula Medical Assistants Society will hold a meeting at the Country Club, Sault Ste. Marie, Michigan, Saturday, June 23, 1956. Program will begin at 9:00 a.m. with registration. In addition to the afternoon business meeting, talks will be given by J. Joseph Herbert, LL.D. on "Legal Problems in the Doctor's Office" and L. Fernald Foster, M.D. on "Your Professional Relations are Showing." Smorgasbord dinner will be served at 7:00 p.m.

* * *

The Fifty-fifth Annual Meeting of the American Proctologic Society will be held at the Hotel Statler, Detroit, Michigan, June 6-9, 1956. The Scientific Sessions of this meeting are open to all members of the medical profession.

Program includes Symposia on "Extra-medical Problems," "Postoperative Diarrheas and Infections" and "Physical Agents Used in the Treatment of Anorectal Diseases." For program and additional information, contact Karl Zimmerman, M.D., 3500 Fifth Avenue, Pittsburgh 13, Pennsylvania.

* * *

Harry J. Loynd, president of Parke, Davis & Company, recently was named "Foreign Trader of the Year" by the Foreign Trade Club of Detroit. Mayor Albert E. Cobo of Detroit presented the award to Loynd at a special dinner-meeting of the Foreign Trade Club in the Fort Shelby Hotel, May 17.

Congratulations, P. D. President Loynd.

* * *

The Children's Bureau recently announced a special federal grant of $55,000 to help the Michigan Crippled Children Commission treat child amputees from other states. Under the new arrangement, children from any part of the country where adequate state or local treatment is not available may be treated at the MCCC Child Amputee Center in Grand Rapids, upon recommendation of the crippled children's agency in the child's home state and acceptance by the Michigan agency.

The Children's Bureau statement, announcing the program, declared "Michigan is believed to have more experience in treating children with congenital or accidental amputation than any other state." Carleton Dean, M.D., heads the Michigan Crippled Children Commission.

Say you saw it in the Journal of the Michigan State Medical Society

Cook County Graduate School of Medicine

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STARTING DATES—SPRING & SUMMER, 1956

SURGERY—Surgical Technique, two weeks, June 4, July 23
Surgical Anatomy and Clinical Surgery, two weeks, June 18
Surgery of Colon and Rectum, one week, June 18
General Surgery, two weeks, September 10
Thoracic Surgery, one week, June 4
Esophageal Surgery, one week, June 11
Breast and Thyroid Surgery, one week, June 18
Gallbladder Surgery, ten hours, June 25
Fractures and Traumatic Surgery, two weeks, June 18
Varicose Veins, ten hours, June 18

GYNECOLOGY—Office and Operative Gynecology, two weeks, June 18
Vaginal Approach to Pelvic Surgery, one week, June 11

MEDICINE—Electrocardiography and Heart Disease, two-week basic course, July 9
Gastroscopy and Gastroenterology, two weeks, September 10

RADIOLOGY—Diagnostic X-ray, two weeks, September 17
Clinical X-ray, two weeks, by appointment

PEDIATRICS—Neurological Diseases: Cerebral Palsy, two weeks, June 18

UROLOGY—Two-week Course, October 8
Cystoscopy, ten days, by appointment

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Senator Charles E. Potter of Michigan has been awarded the Parents' Magazine Medal for Outstanding Service to Children in recognition of his continuing efforts on behalf of the welfare of children. The Senator was instrumental in increasing Federal appropriations for Grants-in-Aid by some 38 per cent in 1955.



Senator Potter *(right)* receives the Children's Service Medal in recognition of his efforts on behalf of the welfare of children.

As one of the results of this, the Mary Free Bed Children's Hospital and Orthopedic Center in Grand Rapids is able to offer treatment to child amputees from any part of the country when adequate local facilities or monies are not available.

* * *

Milton A. Darling, M.D., Detroit, was official representative of the Michigan State Medical Society and of the Wayne County Medical Society, as well as representative of MSMS President W. S. Jones, M.D., at the Centennial Convention of the Michigan State Dental Association. Dr. Darling brought greetings from the medical profession of Michigan to the Dental Association when it convened at its 100th annual session in Detroit on April 16. He also expressed the congratulations of the medical profession to the Dental Association members at the Masonic Temple Centennial Banquet of April 18.

* * *

The importance of environmental factors upon morbidity and mortality of tuberculosis has long been recognized. In a disease where the invasive powers of the agent are in such delicate balance with resistance of the host, factors which substantially augment the virulence of the causative organisms or depress the resistance of the host logically will determine the trends of the disease.—ALTON S. POPE, M.D., and JOHN E. GORDON, M.D., Am. J. Med. Sciences, Sept., 1955.

At the Third National Cancer Conference in Detroit on June 4-5-6, every facet of cancer control, education and research will be discussed by eminent clinicians and teachers from all parts of the world. Foreign speakers include Ivor G. Williams of London, England; Erling Dahl-Iverson, Copenhagen, Denmark; L. M. Franks, London, England; Walter B. Quisenberry, Honolulu, T. H.; Komei Nakayama, Chiba, Japan; Abdol Islami, American Mission, Iran; Alexander Haddow, London, England; Albrecht Schmitt, Cologne, Germany; and Ernst Navatril, Graz, Austria.

Michigan doctors of medicine on the program include Reed M. Nesbit, Ann Arbor; Arthur J. Vorwald, Detroit; Robert C. Horn, Jr., Detroit; Carl V. Weller, Ann Arbor; Norman F. Miller, Ann Arbor; Harry M. Nelson, Detroit; and Isador A. Lampe, Ann Arbor.

Well over 200 leaders in cancer education are on this stupendous program.

On Monday evening, June 4, a workshop on cancer registries will be held for discussion of problems surrounding the establishment of new cancer registries and the modification of existing ones to meet the present requirements of the American College of Surgeons; this session will largely concern itself with the administrative problems of newly formed registries in small to medium-sized hospitals.

The National Cancer Conference is under the sponsorship of the American Cancer Society, in co-operation with its two Divisions in Michigan and the Michigan Cancer Co-ordinating Committee (of which the Michigan State Medical Society is a member). The entire program will be held in the Sheraton-Cadillac Hotel, Detroit, on June 4-5-6.

* * *

The Conference on Aging to be held in Ann Arbor, July 9-11, 1956, will deal with the topic "Health for the Aging," medical and social services. It is being planned by members of the Geriatrics Committee of the Michigan State Medical Society, the Departments of Postgraduate Medicine and Gerontology of the University of Michigan.

A large part of the meetings will be devoted to clinics for doctors of medicine dealing with specific diseases in elderly patients. There will also be groups dealing with the many other problems in the gerontologic field—e.g., geriatric education in medical schools and hospital training programs; the many social and psychologic aspects of the older person; rehabilitation of the physically and mentally handicapped, as well as a consideration of the standards and activities in nursing homes and homes for the aged. In each group, there will be persons of experience and ability so that a highly, successful and stimulating conference will be assured.

Research Seminars will also be held at which the Biologic aspects of aging, medical research problems and the social psychologic viewpoints will be discussed by outstanding research scientists of national reputation.

Final program will be available in the June number, JMSMS. For information, contact A. Hazen Price, M.D., Chairman, MSMS Geriatrics Committee, 62 W. Kirby Avenue, Detroit 2.



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FROM CONGESTIVE
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*Fishberg, A. M.: Hypertension and Nephritis, ed. 5, Philadelphia, Lea & Febiger, 1954, pp. 177-178.

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In Memoriam

William A. Defnet, M.D., a physician in Detroit since 1911, died February 1, 1956, at the age of seventy. He was born in Escanaba; received his M.D. degree at Detroit College of Medicine (Wayne University); served his internship at Harper Hospital. His specialty was eye, ear, nose, and throat.

Osborn H. Ensing, M.D., who had been in active practice of obstetrics and gynecology in Detroit for thirty-three years, died December 17, 1955, at the age of sixty. He was born in Kalamazoo; received his M.D. degree at the University of Michigan; interned at Grace Hospital, Detroit.

George E. Frothingham, M.D., Detroit eye, ear, nose, and throat physician, died November 23, 1955, at the age of eighty-eight. He was born in Gray, Me.; attended the University of Michigan; graduated from the Detroit College of Medicine; served his internship at Harper Hospital. His father, for whom he was named, founded the eye, ear, nose, and throat department at University of Michigan Medical School.

Robert W. Gillman, M.D., pioneer Detroit ophthalmologist, died January 17, 1956, at the age of ninety. He was born in Detroit; graduated from Wayne University College of Medicine; established private practice in 1889.

Frederick J. Hohn, M.D., of Saginaw, died November 6, 1955 at the age of seventy-six. He was born in Caro; received his M.D. degree at Michigan College of Medical Science; became a member of the MSMS Fifty-Year Club in September, 1955.

George H. Kaven, M.D., practicing physician at Unionville since 1908, died November 9, 1955, at the age of eighty. He was born near Unionville; graduated from the Chicago College of Medicine and Surgery (now Loyola University); served his internship at Chicago Lying-In Hospital. He was a Life Member of MSMS.

Gordon D. Ogilvie, M.D., of Manistee, who established practice in Manistee in 1937, specializing in eye, ear, nose and throat, died December 20, 1955, at the age of forty-six. He was born in Arenac County, Michigan, received his M.D. degree at the University of Western Ontario.

Clarence E. Simpson, M.D., Detroit obstetrician and gynecologist since 1906, died December 10, 1955, at the age of seventy-eight. He was born in Sherman, N. Y.; received his M.D. degree from Detroit College of Medicine (Wayne University); served his internship at Harper Hospital. He was a former president of the Wayne County Medical Society; Life Member of MSMS.

Walter R. Snow, M.D., lifelong resident of Jackson and practicing physician there for fifty years, died December 25, 1955, at the age of seventy-seven. He attended the University of Michigan and graduated from the Detroit College of Medicine (Wayne University).

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MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION

(Continued from Page 586)

specifications attached to the gift (to be presented to the Foundation Trustees on January 25).

On December 5, 1955, the Ingham County Medical Society also allocated $6,000 to the Student Loan Fund, with certain specifications attached (to be presented to the Foundation Board of Trustees on January 25).

The Michigan Foundation for Medical and Health Education Lecture, to be given on the occasion of the 1956 Michigan Clinical Institute (with the speaker's expenses to be paid out of the Biddle Fund of the Foundation) will be presented on March 7, by Alton Ochsner, M.D., of New Orleans, who will speak on "What's New in Lung Cancer."

The Biddle Lecture, given on the occasion of the 1955 Michigan State Medical Society Annual Session (with the speaker's expenses paid out of the Biddle Fund of the Foundation), was presented in Grand Rapids on September 28 by Charles L. Anspach, Ph.D., President of Central Michigan College of Education. His highly inspirational and interesting address was titled "Forever Sacred."

The Student Loan Fund has been utilized in the sum of $11,620.50, to aid the medical education of the following students:

Robert E. Pearson	Wayne University
L. Edmond Eary, Jr.	University of Michigan
Benjamin F. Koepke	Wayne University
Donald P. Jackson	Wayne University
John C. Shelton	University of Michigan
Robert O. Webster	University of Michigan
Russell F. Smith	University of Michigan
Paul C. Linnell	University of Michigan

Respectfully submitted,

WM. J. BURNS, *Secretary*

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TRICKS AGAINST OLD AGE

(Continued from Page 546)

enterprising people, is the surest sign of coming old age.

I cross my fingers and knock (three times) on wood, experiencing an *active* tranquility.

Why not? For years I've been one of the non-institutionalized insane, free and at large by the grace of God. A foggy end in a Veteran's Hospital has been my fear. But now I've watched Dr. John Ferguson, throwing his safe, powerful, beneficent one-two punch—awakening and at the same time tranquilizing—at hundreds of a hitherto hopeless residue of chronic mentally ill. For many, a chemical door has been opened; then, aided by the psychotherapy of the hospital's devoted nurse-attendants, I've seen them go back, awakened, out of the darkness to the light, to reality, to useful life. *Rehabilitated.*

If Ferguson and his staff can do this for many of this sad chronic rear-guard, how much greater is the opportunity for you general practitioners, you family doctors? You see mental trouble in its early stages. There seems to be high hope that you'll keep many of the mentally disturbed—young and old—from the tragedy of commitment to mental hospitals.

The physician who thoughtlessly recommends his cancer patient to apply to the local cancer unit for services and supplies of all kinds, without considering the patient's ability to provide such services for himself, is encouraging socialized medicine with all its evils and is rendering a distinct disservice to his profession and his community.

* * *

A generalized service to cancer patients does little or nothing to advance the program of cancer control.

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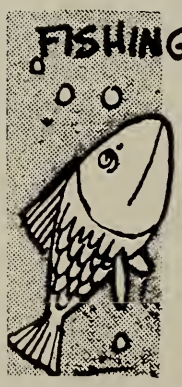
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POLIOMYELITIS. Papers and Discussions Presented at the Third International Poliomyelitis Conference. Compiled and edited for the International Poliomyelitis Congress. Philadelphia and Montreal: J. B. Lippincott Company. Price $7.50.

This record of the Third International Poliomyelitis Congress reminds one of that excellent TV program "You Are There." The only difference is that this is in book form and having been put together in the same sequence as the actual proceedings. takes good reading time for two reasons: first it is lengthy since it contains all the presentations and discussions in their actual sequence and secondly, it keeps the reader interested and not wishing to cease reading due to the feeling that one is in the actual meeting and midst of the proceedings.

This is really the best substitute for not actually attending the conference itself. It brings one up to date (1954) with the latest ideas, works, research and problems encountered all over the world. It is most interesting to see the different aspects of this problem as given by others from all over. The Conference covers the social aspects of Polio, acute medical care, infection and immunity, development in tissue culture, orthopedics, physical medicine and rehabilitation, trends in Polio. All the scientific exhibits are included.

J. L.

PHYSICIAN'S FEDERAL INCOME TAX GUIDE. For the Preparation of 1955 Tax Returns and 1956 Estimates. By Hugh J. Campbell and James B. Liberman. Edited by Henry D. Shereff. Great Neck, New York: Channel Press, Incorporated, 1956. Price, $2.50.

BUTAZOLIDIN. 100 Million Patient Days of Therapy. A Review of the Clinical Experience. Pamphlet.

ALBERT C. FURSTENBERG, M.D.

(Continued from Page 585)

a face full of gravel. If his horse cannot keep ahead, he gets another one." Some of his friends, however, see signs that he may soon slow down during his vacation periods. For years he has, during these times, taken the neighbors' little children for a swim and romp in Crystal Lake. These youngsters have grown up rapidly and it is now a toss-up who will get dunked.

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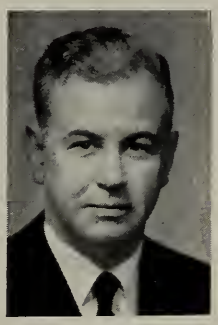
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VOLUME 55 JUNE, 1956 NUMBER 6

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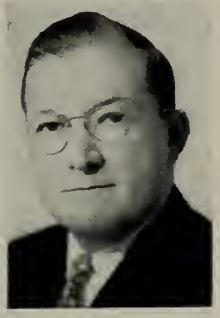
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of the Michigan State Medical Society

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Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 14, Minnesota.

Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, $6.00; single copies, 60 cents. Additional postage; Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year.

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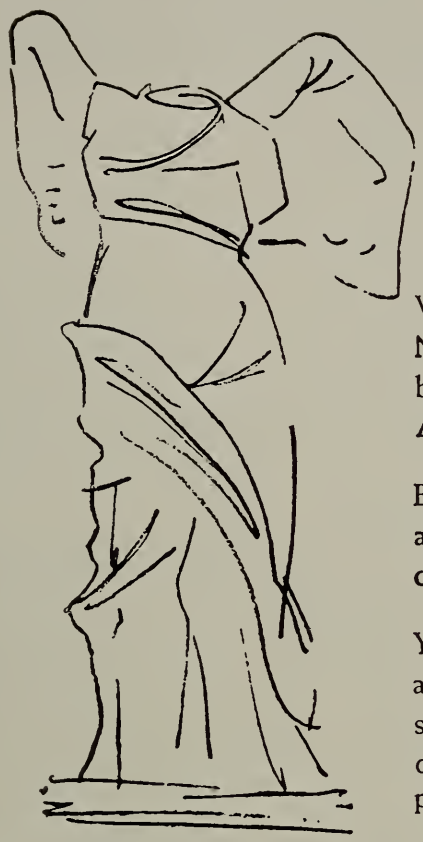
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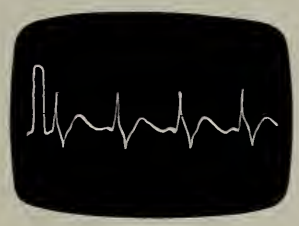
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L. G. Christian, M.D., Ex officio representing Department of Social Welfare.....108 E. St. Joseph, Lansing

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(Continued on Page 624)

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(Continued from Page 622)

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K. H. Johnson, M.D.....1116 Mich. Natl. Tower, Lansing
Ralph W. Shook, M.D.....611 Amer. Natl. Bank Bldg., Kalamazoo
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F. E. Luger, M.D.....303 N. Jefferson, Saginaw
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* * *

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Representing Michigan Division, Inc., American Cancer Society

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Representing S.E. Michigan Division, American Cancer Society

J. A. Cowan, M.D.....Mich. Dept. of Health, Lansing
Representing Michigan Department of Health

M. A. Darling, M.D.....673 Fisher Bldg., Detroit
Representing S.E. Michigan Division, American Cancer Society

Mr. W. F. Doyle.....107 Hollister Bldg., Lansing
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You and Your Business

MSMS ANNUAL SESSION

Luminaries on the program, who have accepted speaking assignments at both the Assembly and Section meetings, September 26-28, 1956, include:

Otis Anderson, M.D., Washington, D. C.
John P. Caffey, M.D., New York, N. Y.
Glassell S. Fitz-Hugh, M.D., Charlottesville, Va.
M. Ralph Kaufman, M.D., New York, N. Y.
John K. Lattimer, M.D., New York, N. Y.
Averill A. Liebow, M.D., New Haven, Conn.
Perry S. MacNeal, M.D., Philadelphia, Pa.
Seward E. Miller, M.D., Washington, D. C.
O. Sidney Orth, M.D., Madison, Wisconsin
Herbert S. Rattner, M.D., Chicago, Ill.
Leon Schiff, M.D., Cincinnati, Ohio
Theodore F. Schlaegel, Jr., Indianapolis, Ind.

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of April 18, 1956

● **L. Fernald Foster, M.D.,** Bay City, was appointed Chairman of a Committee to consider recommendations of both doctors of medicine and of subscribers to Michigan Medical Service, for report to the House of Delegates in September. Other members of the committee are Joseph F. Beer, M.D., St. Clair; Philip Riley, M.D., Jackson; G. W. Slagle, M.D., Battle Creek; Arch Walls, M.D., Detroit, and Wilfrid Haughey, M.D., Battle Creek, Advisor.

● **The text of an advertisement** to be placed in various newspapers during Medical Education Week was presented, corrected and approved.

● **The Governor's Study Commission** on Prepaid Hospital Care Plans requested MSMS to name a consultant to work with the Commission and the Bureau of Public Health Economics of the School of Public Health, University of Michigan, in planning and undertaking this study. Secretary Foster was appointed.

● **Matters of mutual interest** were discussed with Michigan Health Commissioner A. E. Heustis, M.D.

● **Legal Counsel J. Joseph Herbert** reported that Doctor Wm. A. Kopprasch of Allegan had filed an amended bill in his case against the Allegan County Medical Society, Michigan State Medical Society, et al, and that proper answer in this legal case had been filed by defendents.

● **Committee Reports.**—The following were given consideration: (a) Committee on Fee Schedules of Michigan Medical Service, meeting of March 10, including minority report; (b) Committee on Study of MSMS Financial Structure, meeting of March 20; (c) Venereal Disease Control Committee, meeting of March 25.

● **President W. S. Jones, M.D.** reported that Provident Life and Accident Insurance Company, carriers of the MSMS health and accident program, has placed in Michigan a full time representative, Mr. Richard McDermott, to contact MSMS members re their problems and to be of service to the profession. A card of introduction for Mr. McDermott, to be presented to doctors upon whom he calls, was authorized.

● **Carl F. Shelton, M.D.,** Detroit, was appointed to the Maternal Health Committee; S. E. Chapin, M.D., Dearborn, to the Public Relations Committee.

● **For the 1956 Annual Session** to be held in Detroit next September, the Executive Committee of The Council appointed the Assembly Chairmen and Secretaries and approved the list of technical exhibitors to be contacted.

● **For the 1957 Michigan Clinical Institute,** to be held in Detroit next March, the Committee on Arrangements was appointed with Otto O. Beck, M.D., Birmingham, as General Chairman, and Wm. M. LeFevre, M.D., Muskegon, as Chairman of Program Committee.

● **J. D. Miller, M.D.,** Grand Rapids, was appointed as MSMS representative to the President's Conference on Occupational Safety, Washington, D. C.; Wm. H. Gordon, M.D., Detroit, was appointed as MSMS representative to the Michigan Committee on Nursing in National Defense (a committee of the Michigan State Nurses Association); President Jones was appointed as official representative to attend the annual meeting of the State Medical Society of Wisconsin in Milwaukee May 1-2-3.

● **Michigan Week.**—All members of the Michigan State Medical Society were urged by the Executive Committee of The Council to obtain pamphlets re Michigan week (stressing that Michigan is a good state in which to live) for distribution to patients in their reception rooms.

● **R. L. Novy, M.D., Honored.**—Report was given that R. L. Novy, M.D., of Detroit, was elected President of the Conference of Blue Shield Plans in Hollywood, Florida, recently—the first to be elected by the Conference members.

● **W. W. Babcock, M.D.,** Detroit, was appointed chairman of a study committee on package deals between county medical societies and local welfare departments. Other members of the committee are H. H. Hiscock, M.D., Flint; James W.

(Continued on Page 628)



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*Trademark 1. Report of Study by Army, Navy, Air Force Motion Sickness Team: J.A.M.A. 160:755 (March 3) 1956.

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Say you saw it in the Journal of the Michigan State Medical Society

HIGHLIGHTS OF THE COUNCIL

(Continued from Page 626)

Hubly, M.D., Battle Creek; L. L. LeFevre, M.D., Muskegon, and H. W. Wiley, M.D., Lansing.

● **Leon DeVel, M.D.,** MSMS Rheumatic Fever Control Co-ordinator, presented his monthly report.

● **W. B. Harm, M.D.,** Detroit, presented financial report on the testimonial luncheon in honor of national medical presidents et al held during MCI on March 8, which report was received with thanks and congratulations.

● **John M. Wellman, M.D.,** Lansing, President of the Ingham County Medical Society, attended this meeting of the Executive Committee of The Council, as special guest and observer. Host at the meeting was K. H. Johnson, M.D., Lansing, Vice Speaker of the House of Delegates.

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

Applications for certification (American Board of Obstetrics and Gynecology) for the 1957 Part I Examinations are now being accepted. Candidates are urged to make such application at the earliest possible date. Deadline date for receipt of applications is October 1, 1956.

All candidates for admission to the examinations are required to submit with their application, a plain typewritten list of all patients admitted to the hospitals where they practice, for the year preceding their application or the year prior to their request for reopening of their application.

Application for re-examination, as well as requests for resubmission of case abstracts, must be made to the Secretary prior to October 1, 1956.

Current bulletins outlining present requirements may be obtained by writing to the Secretary's office, Robert L. Faulkner, M. D., American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.

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MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physician groups in Michigan, follows:

1956		
June 11-15	Annual Session, American Medical Association	Chicago
June 20	MSMS Executive Committee of The Council	Muskegon
June 22-23	Upper Peninsula Medical Society	Sault Ste. Marie
June 28	Keyport Trauma Day	Gaylord
July 9-11	Gerontology Conference	Ann Arbor
July 19-21	Mid-summer Session of the MSMS Council	Mackinac Island
August 22	MSMS Executive Committee of The Council	Detroit
August 30-31	Coller Penberthy Medical Conference	Traverse City
September 10-13	International College of Surgeons, Annual Congress	Chicago
September 24-25	Annual Session of the House of Delegates (MSMS)	Detroit
September 26-28	MSMS Annual Session	Detroit
September 23 & 28	The Council (MSMS)	Detroit
October 11-12	Michigan Cancer Conference	East Lansing
October 17	MSMS Executive Committee of The Council	Battle Creek
October 17	Maternal Health Day, Genesee County Medical Society	Flint
Autumn	MSMS Postgraduate Extramural Courses	Statewide
November 14	MSMS Executive Committee of The Council	Detroit
November 27-30	AMA Clinical Session	Seattle
November	Fall Clinic, Michigan Academy of General Practice	Detroit
December 12	MSMS Executive Committee of The Council	Lansing

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CT-J-768

AMA Washington Letter

THE MONTH IN WASHINGTON

Among a growing list of health measures receiving active consideration this Congress are two bills that have very good chance of becoming law before adjournment this summer. That both measures have bi-partisan support is an important factor in this election-charged year.

Most advanced in the legislative process, having passed the Senate before the Easter recess, is the national morbidity survey proposal. The other bill, which also originated in the Senate, is the National Library of Medicine plan. Both are endorsed by the Eisenhower Administration.

There has been no national study of the extent of sickness and disability since the rather inadequate survey made in 1936 by the WPA. A series of special and continuing surveys under auspices of the U. S. Public Health Service, accordingly will fill "a very great need," Senator Hill, one of the bill's sponsors, informed the Senate.

Secretary Folsom of the Department of HEW describes the lack of morbidity data as "woeful." Nationwide data on the incidence, cause and duration of sickness and disability are basic, Mr. Folsom has pointed out, to efforts in improving voluntary health insurance.

The Senate agreed and, after writing in an amendment that would assure the conduct of surveys on a non-compulsory basis, the bill passed without a dissenting voice. The measure then went to the House Interstate and Foreign Commerce Committee. The American Medical Association indorses the survey idea.

The National Library of Medicine bill sponsored by Senators Hill and John Kennedy is an outgrowth of one of the Hoover Commission recommendations. The medical task force proposed that the Armed Forces Medical Library be reconstituted as the National Library and placed under the Smithsonian Institution. The Hill-Kennedy bill differs from the Commission in one major respect: it would establish the Library as an independent agency.

Sentiment, meanwhile, has developed for placing the Library in the Department of HEW, under Public Health Service supervision. This was supported by the Administration, and the American Medical Association urged immediate start on construction. Almost two years ago, before the question of a National Library arose, the AMA House of Delegates foresaw the need for housing the Armed Forces Library in more adequate quarters.

The bill's sponsors pointed out that the AMA in June of 1954 had found that "the irreplaceable collections of the Armed Forces Medical Library are now housed in a 67-year-old building totally unsuitable for the purpose by reason of its inadequate size, poor state of repair, susceptibility to fire hazard and general inadaptability to efficient operations. . . ."

Both Senators made this additional point: so long as it remains in the Defense Department, the Library simply cannot compete for funds against the needs and demands of those activities directly related to national defense.

* * *

A major development in the long legislative history of the House-approved bill to open up the social security system to cash disability payments was the testimony of Secretary Folsom to the Senate Finance Committee.

In a three-hour appearance as the 101st and final witness, Mr. Folsom warned against enactment on the disability portion of the bill as well as the plan to lower the retirement age of women from sixty-five to sixty-two.

Disability payments at age fifty, Mr. Folsom declared, present "grave uncertainties" and "potential heavy costs to all social security taxpayers." A majority of the witnesses heard during the extended hearings opposed this section of the bill, H.R. 7225.

* * *

On the eve of the launching of the 1956 Cancer Crusade, the Food and Drug Administration issued its first public warning of this type in several years against the cancer treatment fostered by Harry M. Hoxsey. FDA said long and thorough study by it and the National Cancer Institute has produced "no scientific evidence that the Hoxsey treatment has any value in the treatment of internal cancer." FDA said Hoxsey operates clinics at Dallas, Tex., and Portage, Pa.

* * *

NOTES: Surgeon General Leonard Scheele has been confirmed by the Senate for a third four-year term as head of the U. S. Public Health Service . . . Chairman Priest of the House Interstate and Foreign Commerce Committee has introduced a bill transferring from the Civil Aeronautics Board to the Civil Aeronautics Authority all medical aspects of civil aviation, including pilot examinations. It also authorizes a research program for the proposed Office of Civil Aviation Medicine . . . PHS Division of International Health, Washington 25, D. C., has a number of openings for physicians in foreign posts.

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DEMARK

Medical Education Week Widely Heralded in Michigan

Michigan joined the first nationwide observance of Medical Education Week, April 22-28, with an intensive effort which carried to every part of the state.

In its activities MSMS emphasized the steady progress of the medical profession in its long-range program to broaden medical service throughout Michigan, meanwhile calling attention to the achievements and problems of Michigan's two medical schools and of the seventy-nine other such schools in the nation. With co-operation from the University of Michigan Medical School, Wayne University College of Medicine, the MSMS Women's Auxiliary and several county medical societies —most notably those in Wayne, Saginaw, and Genesee in their own communities—the story of Medical Education Week was told via newspaper, radio, television, movies and speaking appearances before community organizations.

From Lansing the campaign was aided by Governor G. Mennen Williams and the executive office of the State Board of Registration in Medicine.

The opening gun was fired ten days in advance when Governor Williams issued a proclamation calling for observance of Medical Education Week in Michigan (a copy of which accompanies this article). Simultaneously MSMS distributed a news release to the 400 daily and weekly newspapers in the state.



Four organizations with a primary interest in increasing medical service in Michigan were represented when Governor Williams signed his proclamation naming April 22-28 as Medical Education Week. Looking over the Governor's shoulder, left to right, are E. C. Swanson, M.D., Secretary of the State Board of Registration in Medicine; Walter J. Nungester, M.D., University of Michigan Medical School; Kenneth H. Johnson, M.D., Michigan State Medical Society, and Gabriel Lasker, Ph.D., Wayne University College of Medicine Drs. Nungester and Lasker were named as personal representatives by the deans of the two medical schools. Dr. Johnson is Vice Speaker of the MSMS House of Delegates.

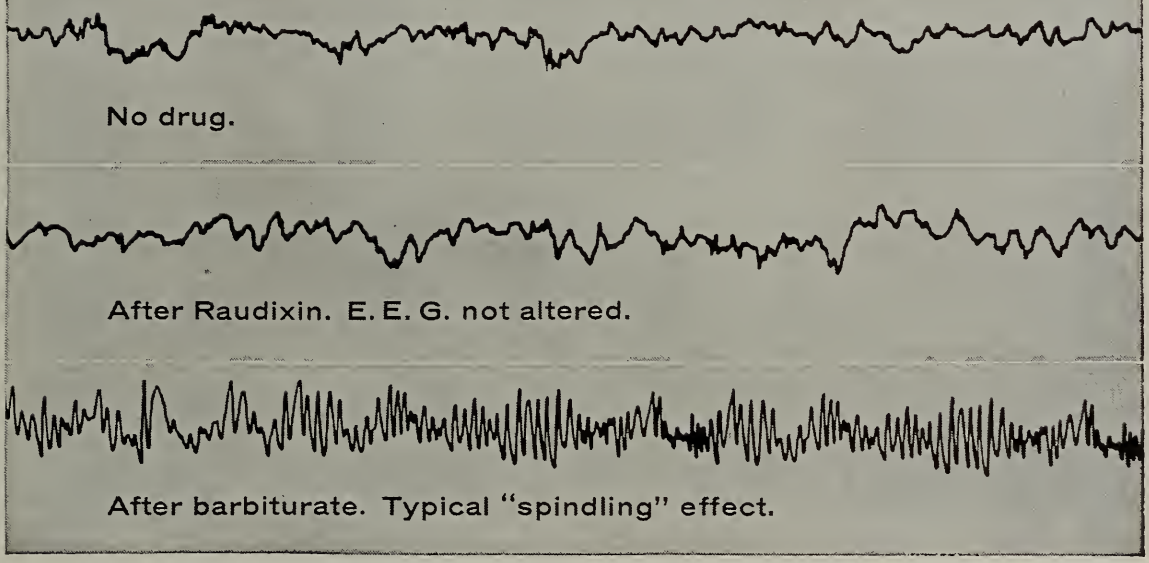
MSMS called attention to the beginning of the week in half-page advertisements which appeared in the Sunday issues of the three Detroit dailies, the *Lansing State Journal* and the *Grand Rapids Herald,* and in the Monday *Grand Rapids Press.* This was followed up by another MSMS news release to all 400 Michigan newspapers, accompanied by two illustrations which told the story of the state's increasing number of M.D.'s.

Still another news story was distributed to 431

(Continued on Page 634)

WHAT IS THE DIFFERENCE BETWEEN A TRANQUILIZER AND A SEDATIVE?

Comparison of the effect of Raudixin (tranquilizer) and a barbiturate (sedative) on the cortical electroencephalogram



No drug.

After Raudixin. E. E. G. not altered.

After barbiturate. Typical "spindling" effect.

Because barbiturates and other sedatives depress the cerebral cortex, the sedation achieved is accompanied by a reduction in mental alertness.

Raudixin acts in the area of the midbrain and diencephalon, and does not depress the cerebral cortex. Consequently, the tranquilizing (ataractic) effect achieved is generally free of loss of alertness.

RAUDIXIN

Squibb Whole Root Rauwolfia Serpentina

DOSAGE: 100 mg. b.i.d. initially; may be adjusted within a range of 50 mg. to 500 mg. daily. Most patients can be adequately maintained on 100 mg. to 200 mg. per day.

SUPPLY: 50 mg. and 100 mg. tablets; bottles of 100, 1000 and 5000.

SQUIBB *Squibb Quality—the Priceless Ingredient*

'RAUDIXIN'® IS A SQUIBB TRADEMARK

Say you saw it in the Journal of the Michigan State Medical Society

(Continued from page 632)

Detroit-area publications through co-operation between Wayne University and the MSMS Detroit Field Office.

A tape recording of the Governor reading his proclamation was distributed to eighty-three radio stations throughout the state. It was broadcast one or more times by almost every station. A series of 10 and 20-second spot announcements prepared by MSMS went to every radio and television station in Michigan. These were used widely. The four major Detroit stations, for example, used them four or five times daily throughout the week.

Four separate television shows were produced during the week. Two were on WWJ-TV, Detroit, over the Fran Harris show and featured Gordon H. Scott, Ph.D., Dean of Wayne University College of Medicine, and E. D. Flintermann, co-chairman of the Detroit Steering Committee. Dean Scott and Mr. Flintermann also appeared in a half-hour telecast with Louis H. Bailey, M.D., over WTVS, Detroit. An MSMS-sponsored program over WKAR-TV, East Lansing, featured E. C. Swanson, M.D., Secretary of the State Board of Registration in Michigan.

During the week the three major Detroit daily newspapers ran a total of four comprehensive news stories, an editorial and a photograph dealing with Michigan's progress in medical education. Two of the news articles were favorably featured in Sunday editions.

High point of the Detroit observance was an open house program at the new Medical Science Building on the Wayne campus, which was attended by 500 guests selected from the city's business, industrial and community leaders.

In Saginaw and Flint members of the county medical societies appeared before a number of civic groups and service clubs to outline the progress in medical education.

The MSMS motion pictures "To Save Your Life" and "Medical Associates" were shown before several audiences as a part of the observance.

Success of the first Medical Education Week in Michigan and in the other states which took an active part has prompted discussion aimed at making it an annual event, with even stronger promotion in 1957.

STATE OF MICHIGAN

Executive Office, Lansing

PROCLAMATION

MEDICAL EDUCATION WEEK

Each of us is aware of the magnificent strides medicine has made in improving the health of our people. Yet few of us fully realize the overwhelming magnitude of research and teaching that has been carried on by our medical scientists and teachers to bring us to this new threshold of physical and mental well-being.

In spite of the fact that the number of Michigan medical school graduates has increased in the past five years by 67 per cent, as compared to the national average of twelve per cent, there are still areas in Michigan lacking in sufficient medical attention simply because there are not enough physicians and medical associates to meet the demand. Since medical schools also participate in the training of nurses, public health officers, pharmacists, dentists and others in the health fields, adequate educational facilities are paramount to the public interest.

The Michigan State Medical Society, representing the medical profession, has emphasized this need for more training in our state. We must join with them in extending every effort to help increase the facilities for medical training in order that the advantages of modern health care can be translated into everyday benefits for all.

THEREFORE, I, G. Mennen Williams, Governor of the State of Michigan, do hereby proclaim the week of April 22 through 28, 1956, as

MEDICAL EDUCATION WEEK

in Michigan, and call upon all citizens to pay tribute to the eighty-one medical schools of the United States, and particularly to the University of Michigan Medical School and the Wayne University College of Medicine; as well as to inform themselves of the continuing needs for expanded and even better medical education facilities in our state.

G. Mennen Williams
Governor



thinking about a new fluoroscope?

get a fine one... the little more it may cost* will pay off handsomely in the long run. A fine Picker fluoroscope like this will serve you efficiently for many a long year. It is built by the same skilled craftsmen to the same high standards as the Picker apparatus used in three out of four Medical Schools and Teaching Institutions in the U. S. and Canada.

**You can rent it (or any other Picker apparatus) if you'd rather.*

Picker x-ray

25 South Broadway, White Plains, N. Y.

Picker x-ray apparatus is backed by a service organization without peer in the field. There's a local Picker office near you, ready to serve you well and promptly in anything having to do with x-ray.

DETROIT 21, MICH., 8514 W. McNichols Road
BATTLE CREEK, MICH., 231 Eldred Street
GRAND RAPIDS 8, MICH., 48 Honeoye S.W.
FLINT, MICH., 4005 DuPont Street
PONTIAC, MICH., 38 Spokane Drive

PR REPORT

HOME SAFETY is stressed in an eight-page booklet produced by the Ingham County Medical Society in co-operation with the Safety Council of Greater Lansing and distributed widely throughout the Lansing metropolitan area. The pamphlet, well-written and illustrated with pen-and-ink sketches, has turned into one of the most effective PR tools developed by a county society which is recognized as one of the leaders in its relations with the public.

Entitled "Home Sweet (?) Home," the publication is built around a 1954 survey of home accidents conducted by the Preventive Medicine Committee of the Ingham society, which indicated an alarming increase in injuries around the home compared with a decreasing rate in industrial and traffic accidents in the Greater Lansing area. Causes of 3,277 injuries to children and adults in home accidents during 1954 are analyzed, and in each category advice is given for prevention of such accidents.

On the back cover is space for listing telephone numbers important in an emergency, with instructions to keep the booklet by the phone for easy reference.

The home accident survey conducted by the Ingham County group is the first such local study to come to the attention of MSMS on a subject which assumes greater importance each year. Ingham and Lansing M.D.'s are to be congratulated on their community service and PR foresight.

KINESCOPE OF FIVE PROGRAMS in the excellent "Frontiers of Health" television series produced by the University of Michigan Medical School have been purchased by MSMS and added to its growing film library. Topics of the five half-hour shows are: Anesthesia, Diabetes, Heart Disease, Glaucoma, and Medical Use of Isotopes.

The kinescopes are available to county medical societies for presentation over local television stations. Their more likely use is with a regular 16-mm. movie projector for showing before health forums and community groups. Portions of the films may be adapted to use in public discussions without using the entire 30-minute presentation.

Requests for their use should be directed to Hugh W. Brenneman, Public Relations Counsel, at MSMS headquarters in Lansing.

"LUCK OF THE DRAW" brought a new twist to the 1956 Michigan Week observance May 20-26. Mayor Exchange Day on May 21 found two physician-mayors changing spots in this annual goodwill event. The exchanges are determined by lot and oddly enough Richard G. Barstow, M.D., Mayor of Gaylord, and Charles Ten Houten, M.D., President of the Paw Paw Village Council, were selected to change places for the day. Both are active MSMS members who believe in participating in community affairs.

Interest in Michigan Week grows year by year. MSMS has been in on the planning at the state level since the observance was first undertaken, and more and more county medical organizations are taking advantage of the PR opportunities which Michigan Week offers. This year William J. Burns, MSMS Executive Director, served as Chairman of the Mobilization Board which tied together the activities of many statewide organizations in the observance.

PR POT-POURRI: "Progress . . . Because Doctors Work Together," the MSMS indoctrination handbook produced under supervision of the Public Relations Committee, is now being distributed to each new member joining the ranks of MSMS. . . . "Medical Horizons," the weekly CIBA medical documentary TV series which ended in March, will return to an 85-station national network for a minimum of 39 weeks, beginning September 9, each Sunday from 4:30 to 5:00 P.M. . . . Soon MSMS will provide attractive printed copies of the Hippocratic Oath, suitable for framing, to each new M.D. as he is licensed to practice in Michigan, through an arrangement with E. C. Swanson, M.D., Secretary of the State Board of Registration in Medicine, and approved by The Council of MSMS. . . . MSMS sponsored an exhibit at the Annual Meeting of the Michigan State Pharmaceutical Association June 5-7 in the Civic Auditorium, Grand Rapids, accepting an invitation from the state's organized pharmacists. MSPA has exhibited at several recent MSMS meetings.

STATE COLLEGE ENROLLMENT

There were 123,943 students enrolled in Michigan's fifty-six colleges and universities this fall.

The Michigan Association of Collegiate Registrars and Admission Officers at East Lansing reports a survey showed 112,746 enrolled in regular campus courses and 11,197 in off-campus courses—but all working toward degrees.

The association did not report previous years' totals, but it is believed the 1955 figure was a record.

The registrars counted 75,742 men and 37,004 women on their campuses. With the exception of the University of Michigan, which did not report veterans enrolled, there were 13,669 war veterans enrolled under the Korean war GI bill and 1,295 under World War II laws.

The total undergraduate enrollment was reported to be 82,106.

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

VOLUME 55 JUNE, 1956 NUMBER 6

Mercaptomerin Sensitivity and Insulin Reaction during Hyperglycemia in the Same Patient

Case Report

By Nelson Taylor, M.D.
Detroit, Michigan

ALLERGIC reactions to Mercaptomerin (Thiomerin®) have been infrequently reported. Insulin reactions in the presence of significant hyperglycemia are also rare. Both of these phenomena occurred as separate incidents in the patient reported.

Case History

A Religious, aged seventy-four, was admitted to the hospital about 5:00 a.m., October 9, 1953, with a chief complaint of shortness of breath. There was also sensation of a lump in the chest but no true pain and no radiation of discomfort.

Past history included diabetes mellitus for twenty-seven years with satisfactory control elsewhere on diet and protamine zinc insulin; 70 units in the morning with unmodified insulin, 25 units supplemental in the morning and 15 units at night. The patient was known to have had for many years arteriosclerotic and hypertensive heart disease for which she had been receiving digitoxin 0.1 mg. daily. Previous cholecystogram had revealed cholelithiasis in the gall bladder, and one year before admission there had been a right hemiplegia with satisfactory motor recovery.

Physical examination revealed a small, co-operative white woman who was very cheerful despite marked dyspnea and orthopnea requiring semiupright position. The skin was moderately cyanotic, warm and moist with sacral and pretibial edema, grade II. Scalp hair was average, axillary hair sparse, and pubic hair average in quantity and distribution. The eyes showed normal pupillary response and no lenticular opacities, but the ocular fundi displayed a vein to artery ratio of 4:1 with increased arterial light reflex and grade II A-V nicking, but no hemorrhages or scars were visible. (Comment was made at the initial examination that the fundi were remarkably good for a person seventy-four years old, particularly with twenty-seven years of moderately severe diabetes.) The tongue was moist; there was a moderate gingivitis. The neck showed moderate venous distention and the thyroid gland was average in size and consistency. The heart was enlarged to the left, rate 90, with a heaving precordium and the apex at the anterior axillary line in the sixth intercostal space; sounds were somewhat distant and the second aortic sound was accentuated; the blood pressure was 135/55. The lungs had many coarse, moist rales throughout and a few fine crepitant rales at both bases. The abdomen was rotund with a moderately large umbilical hernia and the liver margin was smooth, firm, regular and readily palpable 4 cm. below the right costal margin in the right midclavicular line. The back had a moderate dorsal kyphoscoliosis. Rectopelvic examination revealed marked nodular uterine enlargement. Moderate saphenous varices were noted on each leg.

Treatment included placement in an oxygen tent, Mercaptomerin intramuscularly, 2 cc. initially and then 1 cc. daily, digitoxin 0.1 mg. daily, 1200 calorie 500 mg. sodium diet with protein 60 gm. and carbohydrate 140 gm. and protamine zinc insulin 35 units at 7:00 a.m. and 7:00 p.m.

The hospital course was afebrile, there was prompt response to therapy, and the patient became quite comfortable lying almost flat in bed. At about 5:00 p.m., October 21, 1953, the patient had a severe chill, became orthopneic, the temperature rapidly rose to 102° and there was a maculopapular generalized skin eruption with some cyanosis. Intravenous Benadryl,® 25 mg. was administered with prompt relief and by the following morning, the patient was relatively assymptomatic. All medication (supplemental vitamins, siblin, Thiomerin®) was

From the Department of Medicine, St. John Hospital, Detroit.

stopped except the digitoxin and protamine zinc insulin. Four days later, on October 25, because of dyspnea, increasing basal rales and peripheral edema, Mercaptomerin 1 cc. was given intramuscularly at 8:00 a.m. Five hours later, at 1:00 p.m., the patient had a severe chill associated with orthopnea, cyanosis and a maculopapular eruption followed by fever to 102°. The symptoms subsided following Benadryl,® and within twenty-four hours the patient became afebrile.

The patient was maintained on unmodified insulin until October 20, when she appeared well stabilized with a requirement of about 75 units daily. Thereafter, protamine zinc insulin 30 units a.m. and p.m. was started. On October 29, there was a moderate insulin reaction and PZI was reduced to 25 units morning and night. Because of night sweats which the patient said had occurred for many years, NPH was tried in lieu of PZI on November 4, but the diaphoresis persisted; on November 11, there was another mild insulin reaction and the dose was decreased to PZI 23 units a.m. and p.m., on November 16, to 20 and 20 units. On December 11, it was further reduced to 16 units morning and night after the patient had been out of the hospital for almost a month.

Adequate diuresis was maintained with the use of Diamox® 250 mg. daily.

Pertinent laboratory findings included an admission blood count of 5.60 million red blood cells, 14.8 gm. of hemoglobin, 17,800 leukocytes with 88 per cent segmented and 3 per cent non-segmented neutrophils, 4 per cent lymphocytes and 5 per cent monocytes. Two days later (October 11, 1953), the leukocytosis had decreased to 11,100 with 74 per cent segmented and 2 per cent non-segmented neutrophils, 23 per cent lymphocytes and 1 per cent monocytes. The admission urinalysis had a specific gravity of 1.016, sugar++, no acetone, trace of albumin and urate crystals microscopically. Blood urea nitrogen was 14.4 mg. per 100 ml.; carbon dioxide combining power was 23 milliequivalents per liter; fasting blood dextrose was 193 mg. per 100 ml. on admission and thereafter varied between 71 and 120 (Somogyi-Nelson) with two exceptions: on October 19 and November 6, the blood sugar dropped to 34 and 42, asymptomatically. Serum Kahn was negative.

A chest x-ray study on October 9, 1953 was reported as showing marked enlargement of the heart to left and to right, severe arteriosclerotic change in thoracic aorta; lung fields showed emphysema and grade III cardiac decompensation changes. Subsequent studies on October 22 and November 20, showed less cardiomegaly and less evidence of pulmonary congestion. Upper gastrointestinal radiography was reportedly negative while a barium enema showed some hepatic enlargement and a calcified structure presumed to be a fibroid in the left lower quadrant.

Electrocardiographic findings were as follows: both auricular and ventricular rates were 88 with regular sinus rhythm and horizontal position, a P-R interval of 0.22, QRS of 0.08 and QT of 0.32. A late R wave was demonstrated in I and aV1; V4, 5 and 6 had depressed, cupped and sagging S-T segments with early T wave inversion; huge P waves were seen in II, III and aV1 and there were minute Q waves in I, aV1 and V4, 5 and 6.

Conclusions were: (1) left ventricular hypertrophy with damage, (2) auricular hypertrophy, (3) first degree heart block (delayed A-V conduction), (4) digitalis effect.

At 6:30 a.m., December 26, 1953, the patient was readmitted to the hospital in orthopnea and cyanosis with a history of gradually increasing fatigue and known ingestion of salt on Christmas. The patient had also been continuing to have severe night sweats. At 7:45, the patient was very restless; at 7:50, she became more severely dyspneic, tremulous, was bathed in excessive perspiration and rapidly became unconscious. When 50 cc. of 50 per cent dextrose were given intravenously, there was no response, but at 8:10 a.m. 1 cc. of adrenalin 1:1000 was administered intramuscularly and in about twenty minutes, the patient opened her eyes. At 9:00 a.m., the blood sugar drawn before administration of the intravenous dextrose was reported as 496 mg. per cent with CO_2 combining power 17 mEq. per liter and urea nitrogen, 13 mg. per 1000 Ml. Despite the high blood sugar, the patient was clinically in insulin reaction and responded to therapy for hypoglycemia. Subsequently, 130 units of unmodified insulin in small, frequent, fractional dosage were required within the first twenty-four hours.

An admission electrocardiogram verified the presence of a myocardial infarction. However, following this dramatic onset there was gradual healing of the infarct and gradual decrease in insulin requirement to PZI 10 units morning and night. On February 20, for peripheral edema and dyspnea, Diamox®, 250 mg. daily, was started with favorable results.

During the terminal few weeks, there were gradually increasing peripheral edema and ascites, with marked respiratory embarrassment. There was rapid onset of orthopnea, cyanosis and generalized abdominal pain, marked relief with nasal oxygen but many coarse rales in both bases and increased peripheral edema. The patient was comatose for twenty-two hours, had marked oliguria and marked diaphoresis; she expired at 8:00 p.m. May 12, 1954.

At the time of readmission, December 26, 1953, the red blood cell count was 5.72 million, hemoglobin 14.3 gm. and there were 15,700 leukocytes with 92 per cent segmented neutrophils, 6 per cent lymphocytes and 2 per cent monocytes. The next day the leukocytosis had increased to 21,200 with 79 per cent segmented and 13 per cent non-segmented neutrophils, 7 per cent lymphocytes and 1 per cent monocytes. Readmission urinalysis showed ++++ sugar, no acetone and a trace of albumin with 3 to 5 leukocytes per high power field. Blood urea nitrogen was 25 mg. per 100 ml.; cephalin-cholesterol flocculation was negative after twenty-four and forty-eight hours and bromsulfalein test showed 4 per cent dye retention at forty-five minutes. Blood dextrose on admission, 8:00 a.m. December 26, 1953 was 496 mg. per 100 ml., at 9:10 a.m., 516 and at 2:30 p.m., 304. The fasting specimen next morning was 110 and the fasting level subsequently varied from 72 to 141. On the day of death, it was 140 mg. per 100 ml. of blood.

The chest x-ray on December 26, 1953 showed marked dilatation of the heart with grade III cardiac decompensation changes. On January 13, 1954, improvement was reported and on February 17, 1954, an esophagram showed gross cardiac hypertrophy, but the general appearance of heart and lungs demonstrated considerable improvement.

The readmission electrocardiogram, December 26, 1953, showed a regular sinus rhythm with atrioventricular rate of 120, P-R interval of 0.22 to 0.24, QRS of 0.09, QT of 0.28, left axis deviation and horizontal position. Since October 9, ST II, III and aVf were more elevated and there was more slurring of R over the left ventricle. Conclusions were: (1) acute posterolateral myocardial infarction, (2) left ventricular hypertrophy, (3) first degree A-V block, (4) digitalis effect. Serial electrocardiograms showed progressive healing of the posterior infarction, but on May 12, 1954, a curve showed rate 94, slurred RI, aVl, V5 and 6; Q II, III, aVf persist; QS V1, 2, 3; QR V4 and 5; elevated and coved ST V1-4 with late T inversion, diminished voltage.

Conclusions were: (1) old posterior myocardial infarction, (2) recent acute anteroseptal myocardial infarction, (3) left ventricular hypertrophy.

Autopsy Report

External Appearance.—The subject was a small, fairly well nourished, elderly, white woman. There was a slight pretibial pitting edema. A small umbilical hernia was present but did not contain bowel. The finger nails were moderately cyanotic. There was no other external scar, wound, or deformity.

Head.—The cranial cavity was not entered.

Neck.—The trachea was in the midline, the thyroid gland was not enlarged, and there was no cervical lymphadenopathy. The neck veins were moderately distended.

Thorax.—(Mediastinum) The structures of the mediastinum were in their normal relationships.

(Pleural Cavities) Approximately 250 cc. of clear, straw-colored fluid were present in each pleural cavity. A few dense adhesions were present over the apex of the *left* upper lobe. There was no adhesion in the *right* pleural cavity.

(Lungs) The lower lobe of the *left* lung was atelectatic. At the periphery of the upper lobe of the *left* lung were two sharply demarcated, reddish, wedge-shaped infarcts, each measuring 1.5 cm. in greatest dimension. At the apex of the upper lobe of the *left* lung was a tiny, calcified nodule. The *right* lower and middle lobes were also atelectatic. The interlobar fissure between the *right* upper and middle lobes was obliterated by dense adhesions. The upper lobe was pink and airbearing throughout. The bronchi were empty.

(Heart) There was no fluid or adhesion in the pericardial sac. The heart was moderately enlarged, the enlargement being due to *left* ventricular hypertrophy. The *left* ventricle was also markedly dilated. The epicardial surface of the entire *left* ventricle was hemorrhagically discolored. A large soldier's plaque was present over the anterior wall of the *left* ventricle. The coronary orifices were patent and all branches of the coronary arteries exhibited very advanced sclerosis and calcification. The lumen of the anterior descending branch of the *left* coronary artery was completely occluded by a fresh, red thrombus 2 cm. from the origin of this vessel. The first 1 cm. of the *right* coronary artery contained an old, organized thrombus that had been recanalized. Two cm. from the origin of the *right* coronary artery was a recent, red thrombus that completely occluded the lumen. The myocardium of the entire left ventricular wall, including the septum, was almost completely fibrosed. This was in its most severe degree in the posterior septal area and in the anterior apical area. Intermingled with the firm, white, fibrous areas were small, poorly demarcated, hemorrhagic discolorations. The wall of the anterior portion of the *left* ventricle, just proximal to the apex, was markedly thinned to form an aneurysm measuring 3 cm. in diameter. A small mural thrombus was present at the apex of the *left* ventricle. The mitral valve was markedly dilated and was insufficient. There was no gross abnormality of the aortic, tricuspid or pulmonary valves. The arch of the thoracic aorta was very markedly calcified. There was no gross abnormality of the other great vessels.

Abdomen. — (Peritoneal Cavity) Approximately 500 cc. of clear, straw-colored fluid was present in the peritoneal cavity. Dense adhesions were present in the region of the appendix, which was markedly fibrosed. The mesenteric lymph nodes were not enlarged.

(Liver) The liver marking was 2 cm. beneath the costal margin. The surface of the liver was smooth. On section, the liver parenchyma was of average consistency and exhibits irregular, hemorrhagic, mottled areas. There was no true nutmeg appearance.

(Gall Bladder) The gall bladder contained four small, irregular calculi, three of which were impacted in the dome of the fundus. The bile ducts were patent.

(Spleen) The spleen was of average size, and its capsule was smooth. On cut section, the parenchyma was firm and dark red. An accessory spleen measuring 1 cm. of diameter was present.

(Pancreas) The pancreas was very markedly atrophic. It, however, exhibited no gross focal lesion.

(Gastrointestinal Tract) There was no gross pathologic alteration of the gastrointestinal tract which was examined from esophagus to rectum.

(Adrenal Glands) Each adrenal gland was of normal size and exhibits no gross focal lesion.

(Kidneys) The kidneys were in their normal positions. The capsules stripped with ease, leaving slightly granular surfaces. The cortices are distinct from the medullae and the pelves and calyces were not dilated.

(Urinary Bladder) The urinary bladder was void of urine and exhibited no gross abnormality.

(Genital Organs) The genital organs were atrophic. A small subserous leiomyoma was present in the fundus of the uterus.

Gross Anatomic Diagnosis.—

1. Hypertensive and arteriosclerotic heart disease
 (a) Massive old and recent infarction, left ventricle
 (b) Recent thrombosis, right coronary artery, and left anterior descending coronary artery
 (c) Old recanalized thrombus, right coronary artery
 (d) Aneurysm, anterior wall, left ventricle
 (e) Mural thrombus, left ventricle
 (f) Left ventricular hypertrophy and dilatation
 (g) Relative mitral insufficiency
 (h) Anasarca
 (i) Passive congestion, liver
 (j) Recent infarcts, upper lobe, left lung
2. Diabetes mellitus (Clinical)
 (a) Pancreatic atrophy
3. Accessory spleen
4. Cholelithiasis
5. Healed appendicitis
6. Umbilical hernia
7. Healed tuberculosis, left upper lobe
8. Healed pneumonitis, middle lobe, right lung

Microscopic Findings.—Sections through the left ventricle revealed areas in which cardiac muscle had been completely replaced by fibrous connective tissue. In the area of the aneurysm the ventricle wall was markedly thin. Incorporated in these areas of old infarction were large areas of vascular engorgement, indicating a recent re-infarction. Section through the apex of the left lung revealed a dilated bronchus with a chronic inflammatory reaction in its wall. In the surrounding lung parenchyma were several small, poorly formed, healed tubercles consisting of fibrous connective tissue and Langhans' giant cells. In the area taken to represent an infarction, at the periphery of the upper lobe of the left lung, the inner portion of the involved area was lined by fairly well-differentiated, neoplastic squamous epithelial cells that were well cornified. Well-formed epithelial pearls were present. The remaining portion of this lesion consisted of necrotic tissue and exfoliated squamous-cell carcinoma cells. The central veins of the liver lobules were engorged, and the surrounding liver sinusoids contained increased amounts of blood. There was a slight glycogen shift from the cytoplasm of the hepatic cells to the nuclei, indicating a terminal diabetic acidosis. The pancreas was slightly atrophic, but the islands of Langerhans' were well preserved. The adrenal glands appeared normal histologically. Other tissues were without significant histologic alteration.

Final Diagnosis:

1. Hypertensive and arteriosclerotic heart disease
 (a) Massive old and recent infarction, left ventricle
 (b) Recent thrombosis, right coronary artery and left anterior descending coronary artery
 (c) Old recanalized thrombus, right coronary artery
 (d) Aneurysm, anterior wall, left ventricle
 (e) Mural thrombus, left ventricle
 (f) Left ventricular hypertrophy and dilatation
 (g) Relative mitral insufficiency
 (h) Anasarca
 (i) Passive congestion, liver
2. Diabetes mellitus (Clinical)
 (a) Pancreatic atrophy
3. Accessory spleen
4. Cholelithiasis
5. Healed appendicitis
6. Umbilical hernia
7. Healed tuberculosis, left upper lobe
8. Healed pneumonitis, middle lobe, right lung
9. Grade II squamous cell carcinoma, left lung (Microscopic)

Comment

The reaction to Mercaptomerin in this patient was established as a definite sensitization by the response which was repeated on two separate occasions. In the second instance, no other factor could have been involved. It was also proved to be allergic in the rapid alleviation of symptoms following intravenous Benadryl.®

Reactions to mercurials have been reviewed by Harris,[1] and the comment is made that they may constitute febrile paroxysms usually associated with chills and have previously been reported to occur repeatedly in the same patient thus establishing the causal relationship. Cutaneous phenomena appeared in a few patients, usually erythema, which was transient but in one instance the process continued to exfoliation. Reactions seldom follow the initial injection but often occur about the sixth or seventh time (our patient had received twelve daily doses). The severity is usually independent of the dose given but when mild symptoms occur, they contraindicate further therapy with the same mercurial. Such symptoms are slight chilliness, mild elevations in temperature and transient erythema. However, hypersensitivity to one mercurial does not necessarily contraindicate the use of others. Skin testing is rarely helpful although desensitization may be valuable.

Reeves[2] mentions a severe febrile reaction following a chill with the use of Meralluride. Subsequently, Thiomerin® was used without difficulty.

Many articles have stressed the lack of toxicity of Thiomerin.®[,3-10] Brimi[11] states: "for all practical purposes, systemic reactions to Thiomerin®

do not exist. Occasional instances of nausea, muscle cramps and weakness secondary to rapid electrolyte loss occurred."

Weissman and Gelfand[12] report in detail one case in which reactions to Thiomerin® occurred three separate times marked by fever, pruritic erythematous eruption and circulatory collapse. The patient recovered with the use of antihistaminic agents, fluids and sedation.

The other extremely disturbing feature in the control of this case was the appearance of severe and profound insulin reaction progressing to coma, responding to treatment for hypoglycemia. After recovery it was discovered that the process had occurred in the presence of hyperglycemia in the range of 500 mg. per 100 ml. of blood.

Many reports have emphasized the protean nature of hypoglycemic reactions and there is no unanimity of explanations as to their cause. The known causes have been listed by Benjamin[13]: insuloma, panhypopituitarism (Simmond's disease), hypoadrenocorticism, hypothyroidism, liver dysfunction, functional "hyperinsulinism" and exogenous insulin.

While the intracranial contents were not examined at autopsy in this patient, the thyroid and adrenal cortices were normal suggesting that the anterior pituitary was intact despite the fact that necrosis, atrophy or other failure of the anterior hypophysis could explain the decreasing insulin requirement.

Wauchope's[14] review of the literature included one case of a forty-six-year-old diabetic who regularly had hypoglycemic symptoms with fall of the blood sugar from 320 to 280 mg. per 100 cc. of blood. In contradistinction, another case is recorded with no symptoms despite a fall of blood sugar from 328 to 53 mg. per 100 cc. of blood in five hours. There have been frequent reports of blood sugars in children under twelve years of 50 to 25 and assymptomatic. Rice (in Wauchope's article[14]) reported one juvenile diabetic walking around and Benjamin[13] another with blood sugars too low to read.

Since blood sugar levels vary widely with and without symptoms, the oft repeated dictum is reemphasized: when there is doubt as to the etiology of coma in a diabetic, give dextrose; insulin may be fatal.

Alexander[15] reports the sudden development of a series of severe hypoglycemic episodes in a diabetic fairly well controlled for nineteen years. Death resulted from extended hypoglycemia and necrosis of the pituitary was found thus simulating the Houssay phenomenon.

Musser and coworkers[16] studied fourteen diabetics with frequent "insulin reactions" and found that reactions unaccompanied by hypoglycemia were common; all patients were anxious; all patients were hyper-reactive to two minutes of hyperventilation; the symptoms incurred by overbreathing reproduced in these patients their typical symptoms of "insulin reactions." John[17] had previously made parallel observations.

An excellent summary of presumed mechanisms of action of insulin and of hypoglycemia on the central nervous system has been presented by Murphy and Partell.[18] They considered the possibilities that insulin per se is toxic to brain cells, that hypoglycemia is accompanied by changes in the electrolyte balance but incline to the view that brain cells suffer from carbohydrate deprivation and resultant anoxia since the clinical and pathological effects of prolonged anoxia are similar to those resulting from hypoglycemia.

In addition to the above which is summarized as diminished metabolite supply (reduction in glucose and oxygen), Fazekas[19] remarks a depression of cerebral enzyme systems with lowered rate of cerebral oxygen consumption since the brain obtains its energy almost exclusively from oxidation of glucose.

Maddock and Krall[20] differentiate two types of insulin reaction: the adrenalin like reaction due to rapid acting insulin with symptoms of sweating, hunger, tremor, weakness, palpitation and possible progression to abnormal behavior, diplopia, convulsions and unconsciousness; the central nervous system type is due to long acting insulin and manifest by headache, nausea, visual and speech disturbances, mental confusion, personality changes with laughing and loud talking, anxiety or depression and crying; automatic behavior may ensue with twitching, athetoid movements, grimacing or mask like facies; a hemiplegia may appear or there may be convulsions and if untreated, progression will eventuate in coma and death.

Fabrykant and Bruger[21] have pointed out that the rate of utilization of carbohydrate by the brain must be measured by the rate of cerebral consumption rather than by the rate of supply. Thus, decrease in brain sugar and blood sugar do

not necessarily greatly affect a brain whose carbohydrate requirement is low.

Conn[22] has remarked that most observers believe it is the rapid fall in blood sugar rather than the final level reached that accounts for the reaction usually ascribed to hypoglycemia. However, Fabrykant[23] studied the arteriovenous (capillary-venous) distribution of sugar in twelve patients with clinical histories of spontaneous hypoglycemia. Intensity of hypoglycemic episodes correlated with the level of "arterial" (capillary) blood sugar and rate of fall of the blood sugar was not the deciding factor.

Goodman[24,25] has analyzed insulin reactions in diabetic patients remarking that 81% were attributable to the protamine group. In this patient, it is possible that depots of incompletely utilized protamine zinc insulin may have suddenly become effective. Consistent with the view of Fabrykant,[21] the brain may have become adjusted to hyperglycemic level and then with sudden drop have manifest symptoms. In any event, the insulin reaction was proved by response to adrenalin which induces release of glycogen from the liver and the hyperglycemia was proved by requirement of 130 units of insulin in twenty-four hours.

Rudnikoff[26] indicated that insulin can increase effects resulting from carotid sinus stimulation without the presence of hypoglycemia. The hormone may affect the vagus center so that ordinary impulses from any part of the body to it can produce exaggerated response. Thus syncopal and cardioinhibitory effects may be noted and may be eliminated by the use of atropine.

Himsworth[27] has suggested that labile diabetes may be a direct result of the imposition on clinical medicine of chemical standards of normality with disregard for the patient. As a corollary, Barach[28] remarked that heart attackes have been precipitated during hypoglycemia in patients who are overzealous to keep sugar-free. In this instance however, had the chemical reports dictated therapy, insulin would have been used first. The myocardial infarction was present on admission as demonstrated by the initial electrocardiogram.

An interesting animal study by Coulson and Hernandez[29] showed that injected glucose is removed from the blood stream of the alligator at a very slow rate. This rate is determined by the temperature of the animal and is a function of the metabolic rate. One unit of insulin per gram of body weight produces an immediate state of "shock" which lasts a few hours. This condition occurs during a period of hyperglycemia. A second state of "shock" which is due to hypoglycemia occurs more than a day later. The initial "shock" may simulate the insulin reaction in this case in the presence of hyperglycemia.

In a group of fifteen labile diabetics, Fabrykant[30] demonstrated electroencephalographic abnormalities in 80% and severely disordered patterns consistent with convulsive tendency or focal pathology in almost half the patients. In three, genetic factors were present and in one, there was typical epilepsy. The distorted patterns in the remaining patients were attributed to disturbed brain function resulting from repeated severe insulin reactions. Abnormal electrocerebral activity reduced the threshold for insulin reactions, increased their intensity and lowered their responsiveness to carbohydrate therapy. It also produced pseudohypoglycemic reactions occurring in absence of critical hypoglycemia. Effectiveness of anticonvulsant drugs in such problems was confirmed.

The autopsy report of squamous cell carcinoma, left lung was an incidental finding. The patient was not known to have ever smoked.

Summary

1. An allergic reaction to Thiomerin® occurred and was repeated following a second dose of Thiomerin.® Response to antihistamine therapy was prompt each time.

2. In the same patient, severe insulin reaction proceeding to profound coma occurred in the presence of hyperglycemia (496 mg. dextrose per 100 ml. of blood). Recovery followed treatment for hypoglycemia.

Acknowledgments

The electrocardiograms were interpreted by Drs. Howard Klein and John Murphy; the x-ray studies were interpreted by Drs. Herbert W. Devine and E. L. Freitas; the autopsy was reported by Dr. George Fritz.

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VA REPORT SHOWS MEDICAL VOLUME FOR FISCAL YEAR

On June 30, 1955, Veterans Administration was operating 118,608 hospital beds. In the preceding year, the daily patient load averaged 106,682 (91 per cent of capacity), and 40 million patient days of care were provided. Thirty-eight per cent were admitted for treatment of service-connected disabilities. Total of 61,390 beds were reserved for care of psychiatric and neurologic patients, with an additional 1,604 beneficiaries accommodated in non-VA institutions. These are a few of the facts on veterans' medical and hospital services contained in VA's latest fiscal year report.

In 1954-55, hospital admissions totaled 498,187 and discharges, 494,668. Turnover rate was slightly above previous year but well below peak year for turnover, which was 1949-50.

A high proportion of psychiatric and chronic cases is reflected in figures which disclose that on November 30, 1954, 64 per cent of all patients hospitalized had been on rolls more than 90 days and 49 per cent for more than one year. Thirty-two per cent had been hospitalized more than five years.

Outpatient medical services, limited to service-connected cases, were given to 2,156,000 veterans by VA staff physicians and fee-basis private practitioners. Greatly reduced by action of Congress, outpatient dental treatment was received by 268,000 veterans.—W.R.M.S., April 24, 1956.

Silicosis

A New Aid in the Diagnosis of Silicosis

By John E. Summers, M.D.
Grand Rapids, Michigan

WHILE silicosis is a fairly common disease, it is frequently quite difficult to make a definite diagnosis unless one has an unequivocal history of exposure to silica dust and classical chest x-ray findings. Even then there is usually a great difference of opinion as to what constitutes an adequate exposure history because many individuals, even when exposed to an atmosphere containing silica apparently do not develop silicosis. Concerning the chest x-ray there is also a great difference of opinion.

Crystalline silica is not the only toxic dust that can cause damaging fibrosis of the lungs. It is known that silicates such as asbestos, talc, mica, and soapstone can also do this. Quite recently beryllium has been added to the list.

As the chest x-ray in these dust diseases may simulate tuberculosis, sarcoidosis or other chest diseases, a more accurate method to aid in the differential diagnoses of lung diseases is needed.

Since the lymphatic drainage of the lungs is upwards into the neck, inhaled particles might be carried into the lower cervical region and deposited in the lymph glands of the area. The nodes located near the junction of the internal jugular and subclavian veins have been called the anterior scalene nodes. Since anterior scalene node biopsy has become a widely accepted procedure to aid in the diagnosis of intrathoracic diseases it would seem feasible to examine these nodes for silica.

Technique of Anterior Scalene Node Biopsy

The technique of operation for the anterior scalene lymph nodes is somewhat tedious but when carefully performed carries no operative risk or complications. In seventy-two anterior scalene node operations performed during the past year there have been no complications. It can be performed as an out-patient procedure. There are no contraindications to the operation. It is of great value in the diagnosis of sarcoidosis.

As a rule the patient is given 1½ grains of nembutal one hour prior to operation and 100 milligrams of Demerol just before the operation. I have been having the patient drink a glass of half milk and half cream before surgery to facilitate in the location of the main lymph ducts in the neck. If the thoracic duct is injured this can readily be detected by the flow of chyle and the duct can be ligated. The cervical portion of the thoracic duct has been ligated on several occasions without sequellae.

Under local anesthesia (1 per cent procaine) a 1½ to 2 inch incision in a skin crease in the neck above the clavicle and centering over the lateral border of the sternocleidomastoid muscle is made. The incision is carried down through the skin, subcutaneous tissue and playtsma muscle. One or two small vessels may require ligatures. Using three small thin bladed retractors held by two assistants the dissection is carried down into the fat pad over the anterior scalene muscle. The dissection may be quite time consuming due to the presence of large veins especially to a large external jugular vein although the transverse cervical veins are frequently large also. The anterior scalene muscle is indentified by palpation with the tip of the finger introduced into the depths of the wound. The amount of retraction required to permit dissection at the lower end of the anterior scalene muscle depends upon the width of the clavicular portion of the sternocleidomastoid muscle.

Any nodes in the fat pad anterior to the scalene muscle are removed. Removal of the fat pad when it does not contain visible nodes has been unrewarding. It is best that the nodes be dissected out and sent alone to the pathologist. The pathologist also prefers to receive non-crushed nodes. The best results are obtained by strong retraction of the lower end of the sternocleidomastoid muscle and deep dissection beneath the clavicle. The closer the nodes are to the juncture of the subclavian and internal jugular veins the better the results. In the depths of the wound a black

Presented at Michigan Trudeau Society meeting, Veterans Administration Hospital, Ann Arbor, Michigan, November 10, 1955.

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node may be indistinguishable from a portion of a large vein; here palpation will be helpful. If one persists in the dissection usually a large node can be pulled up from beneath the clavicle. The phrenic nerve is usually demonstrated as the operation proceeds. On the left side the cervical portion of the thoracic duct is frequently dissected out. When the nodes are adherent to the thoracic duct, the latter may be ligated and divided.

In two patients, one of whom had a bilateral operation, I failed to secure enough lymph node to be of diagnostic value.

After the node or nodes have been secured the wound is washed out and closed in layers using fine interrupted cotton sutures. A pressure dressing is applied. The skin sutures are removed in four days.

The lymph nodes are then divided into three portions: one portion in formalin for x-ray diffraction analysis; one portion in formalin for microscopic examination and cross polarization studies; and one portion in saline for bacterial and fungi studies. These latter include cultures for aerobic and anaerobic bacteria, for fungi and, slide, culture and guinea pig studies for tubercle bacilli.

TABLE I. PATIENTS WHOSE ANTERIOR SCALENE LYMPH NODES CONTAIN CRYSTALLINE SILICA BY X-RAY DIFFRACTION ANALYSIS.

Patient	Exposure to Dust	Clinical Diagnosis	Remarks
1. J. T. 68 yr. old w. m.	Foundry worker 28 yrs. Quit 3 yrs. ago.	Far advanced silico-tuberculosis.	Only one positive T.B. test (on 7-23-54 positive on slide.) In San. from 8-10-54 to 2-24-55. Out-patient now.
2. C. S. 71 yr. old w. m.	Molder in foundry for 9 yrs. 40 yrs. ago.	Far advanced silicosis.	All sputa neg. for T.B. In San. 10-22-54 to 12-21-54. Out-patient now.
3. A. M. 50 yr. old w. m.	Sand blasting for 3½ yrs.	Far advanced silico-tuberculosis.	All sputa positive T.B. since 8-24-54. Known silicotic since 1932. Received course of cortisone in 1954. In San. since 8-21-54.
4. P. V. 61 yr. old w. m.	Foundry worker for 3½ yrs. On sanding belt in furniture factory 20 yrs.	Far advanced silico-tuberculosis.	Sputa positive for T.B. in Nov. '54 only. In San. since 11-9-54.
5. R. B. 72 yr. old negro.	Cleaner in railroad shops (used sand blasting) for 30 yrs.	Far advanced silicosis. Autopsy showed no tuberculosis.	All sputa (5-24-54 to 6-15-55) neg. for T.B. Died 7-5-55. Autopsy shows no evidence of T.B.
6. H. J. 73 yr. old w. m.	Farmer	Fibrosis of lungs with emphysema.	All sputa neg. for T.B. (4-2-53 to 7-30-55). In San. 12-13-54 to 4-16-55. Out-patient now.
7. H. R. 60 yr. old w. m.	Tool and die maker; did much grinding most of life.	Fibrosis of lungs.	Sputa Oct. '54 neg. for T.B. Out-patient. Chronic cough.
8. C. B. 73 yr. old w. m.	Lathe worker in brass for 8 yrs.; miter sawyer for 28 yrs.	Fibrosis and emphysema of lungs.	Sputa Aug. & Sept. '54 positive for T.B. In San. 8-24-54 to 3-9-55; expired—no autopsy.
9. A. R. 69 yr. old w. m.	Molder in foundry for 40 yrs.	Far advanced silico-tuberculosis	All sputa positive for T.B. since 7-6-53 to 10-25-55. In San. since 7-10-53.
10. S. S. 60 yr. old w. m.	Foundry worker for 35 yrs.	Far advanced silico-tuberculosis.	Sputa neg. in 3-17-52. Positive for T.B. since 12-12-54. In San. since 12-8-54.
11. A. B. 60 yr. old w. m.	Foundry worker for 17 yrs.	Silicosis	Sputa neg. 2-9-51 to 8-24-54. Out-patient. Complains of cough, dyspepsia, weakness.
12. D. M. 72 yr. old w. m.	Foundry worker for 10 yrs.	Fibrosis of lungs.	Sputa neg. for T.B. in May of '54 and Mareh '55. Out-patient.
13. G. B. 51 yr. old w. m.	Foundry worker for 11 yrs.	Silico-tuberculosis	Sputa positive for T.B. in March '55. Now in Muskegon San.
14. M. Z. 67 yr. old w. m.	Cleaner in railroad shops for 33 yrs.	Silico-tuberculosis.	Sputa positive for T.B. in June & Oct. '53. Neg. since. In San. 6-22-53 to 11-26-54. Now out-patient.
15. J. G. 61 yr. old w. m.	1 yr. in cement plant. 17 yrs. on sanding machines in furniture factories.	Silico-tuberculosis.	Sputa positive for T.B. in Aug. & Sept. '53. Neg. since. In San. 9-9-53 to 9-18-54. Now out-patient.
16. G. S. 53 yr. old w. m.	Foundry worker for 16 yrs.	Silico-tuberculosis.	Sputa positive T.B. since 1948. In San. since 3-25-55.
17. L. E. 65 yr. old w. m.	Fired boilers and shoveled coal for 19 yrs. Farmer.	Fibrosis of the lungs.	Sputa neg. 4-11-55. Out-patient.
18. J. K. 69 yr. old w. m.	Sand blasting for 10 yrs. Plasterer by trade.	Silicosis.	All sputa neg. In San. 4-21-55 to 5-13-55. Out-patient.

Bacterial Studies

The cultures for aerobic and anaerobic bacteria and fungi were all negative for pathogenic

organisms. In two patients with far advanced pulmonary tuberculosis tubercle bacilli were isolated from the anterior scalene nodes.

silica particles be found. As cross polarization can detect particles down to ½ micron in size these results would indicate that in no case, even

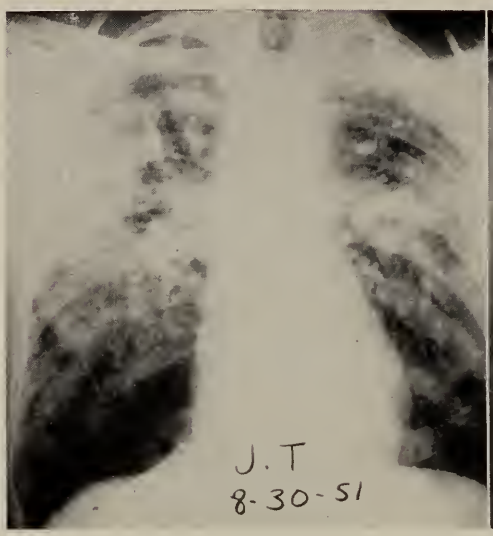


Fig. 1. Case 1 (J. T.) Table I. Chest x-ray of a sixty-eight-year-old white man who had worked in a foundry for twenty-eight years. Sputa positive for tubercle bacilli. Scalene node positive for silica by x-ray diffraction analysis.

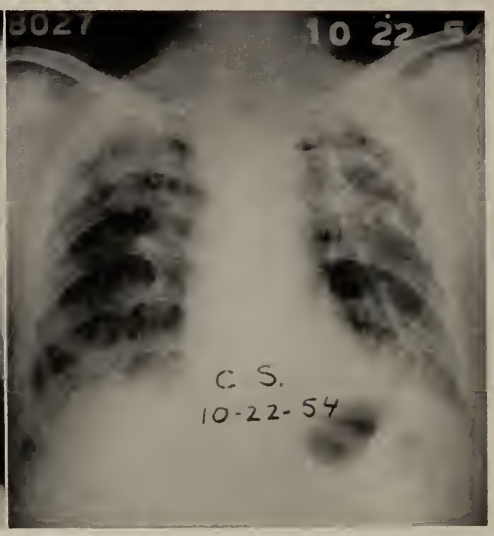
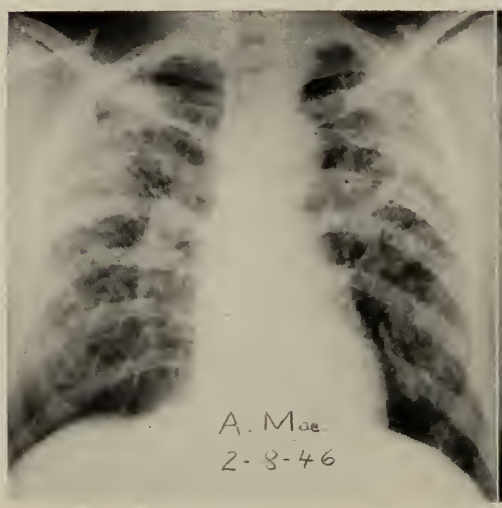


Fig. 2. Case 2 (C. S.) Table I. Chest x-ray of a seventy-one-year-old white man who was a molder in a foundry for nine years. Sputa negative for tubercle bacilli. Scalene node positive for crystalline silica by x-ray diffraction analysis.





Figs. 3 and 4. Case 3 (A. M.) Table I. Chest x-rays of a fifty-year-old white man who worked for three and one-half years sand blasting cleaning railroad cars. His sputa became positive for the first time for tubercle bacilli in 1954. His anterior scalene node was positive for crystalline silica by x-ray diffraction analysis.

Microscopic Studies

Microscopic examination of these lymph nodes in all cases was done and only in one case did the node reveal the typical silicotic nodules. Anthracosis was a frequent diagnosis.

Cross Polarization Studies

Cross polarization of the nodes was performed in each case and in no case could evidence of in those unequivocal cases of far-advanced silicosis, are particles larger than ½ micron in size to be found in the anterior scalene nodes.

X-Ray Diffraction Analysis

The results of x-ray diffraction analyses of these anterior scalene nodes are divided into two groups: (1) (Table I) those patients whose an-

terior scalene lymph nodes contain crystalline silica, and (2) (Table II) those patients whose anterior scalene lymph nodes do not contain crystalline silica.

During the early part of the experiment the silica was reported as being either present or absent. As the work developed silica was reported as being present in a large amount, or an intermediate amount, or a small amount, or a trace, or as being absent. There should be a quantitative relationship between the amount of silica present in the lungs and in any given set of lymph nodes.

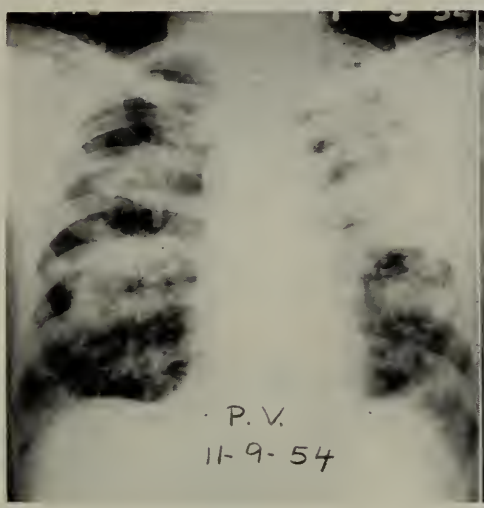


Fig. 5. Case 4 (P. V.) Table I. Chest x-ray of a sixty-one-year-old white man who worked in a foundry for three and one-half years. Following this he worked for twenty-one years in a furniture factory mainly sanding wood on a motor driven sanding belt; he also ground tools each day. Sputa positive for tubercle bacilli. The scalene node is positive for crystalline silica by x-ray diffraction analysis.

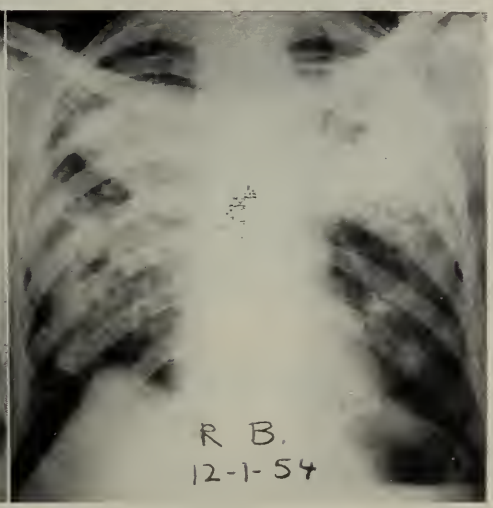
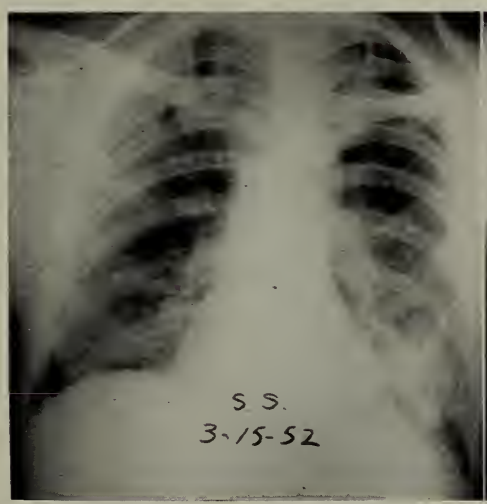
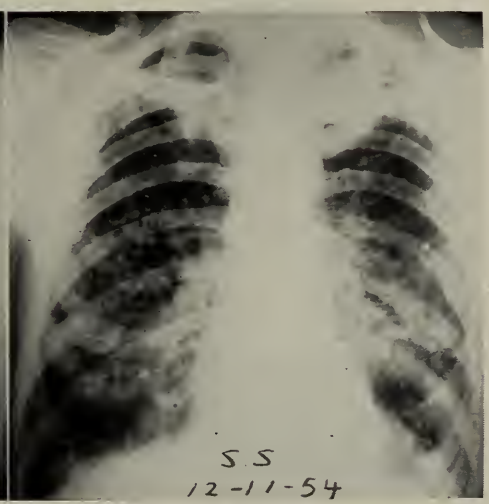


Fig. 6. Case 5. (R. B.) Table I. Chest x-ray of a seventy-two-year-old Negro who worked for thirty years in railroad shops as a cleaner of boilers. In this work he did much sand blasting. All sputa negative for tubercle bacilli. The anterior scalene node was positive for crystalline silica by x-ray diffraction analysis. He expired on July 5, 1955; autopsy showed anthracosilicosis with no tuberculosis.





Figs. 7 and 8. Case 10 (S. S.) Table I. Chest x-rays of a sixty-year-old white man who had worked in foundries for thirty-five years. Sputa negative for tubercle bacilli in 1952 but positive in 1954. Note the increase in the size of the nodules in the lungs after the development of tuberculosis. The scalene node was positive for crystalline silica by x-ray diffraction analysis.

Group 1 (Table I)

In this group there are eighteen patients whose anterior scalene nodes were found, by x-ray diffraction analyses, to contain crystalline silica.

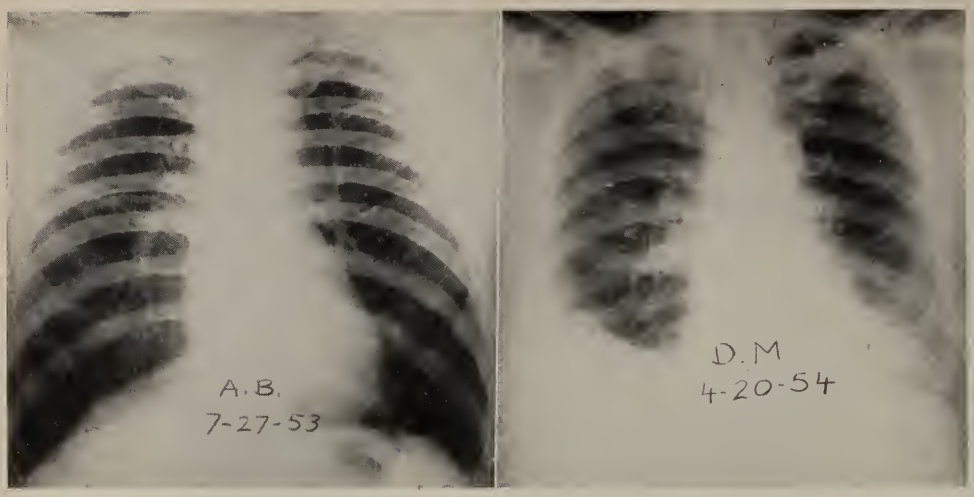


Fig. 9. Case 11 (A. B.) Table I. Chest x-ray of a sixty-year-old white man who had worked in foundries for seventeen years. All sputa negative for tubercle bacilli. The scalene node was positive for crystalline silica by x-ray diffraction analysis.

Fig. 10. Case 12 (D. M.) Table I. Chest x-ray of a seventy-two-year-old white man who had worked in a foundry for ten years. All sputa negative for tubercle bacilli. The scalene node was positive for crystalline silica on x-ray diffraction analysis.



Figs. 11 and 12. Case 14 (M. Z.) Table I. Chest x-rays of a sixty-seven-year-old white man who had worked for thirty-three years for a railroad cleaning firepots and boilers. Sputa positive for tubercle bacilli in 1953. Note the degree of clearing of the chest x-ray from 1953 to 1954 while the patient was in the sanatorium being treated for tuberculosis. His scalene node was positive for crystalline silica by x-ray diffraction analysis.

A study of the case abstracts in Table I will show that usually a person must have far-advanced silicosis before crystalline silica can be detected in the anterior scalene nodes.

Case 6.—H. J., a seventy-three-year-old white man, presents an interesting feature, in that while he was a farmer all of his life, his chest x-ray revealed fibrosis and emphysema of the lungs, and his anterior scalene node was faintly positive for crystalline silica by x-ray diffraction analysis.

Group 2 (Table II)

In this group there are twenty-one patients whose anterior scalene nodes did not contain silica by x-ray diffraction analysis. Most of these people have not been exposed to what we generally think of as an atmosphere contaminated with appreciable amounts of silica. It will be noted (Table II) that a few persons of this group have worked in an atmosphere possibly contaminated with toxic amounts of silica. These latter cases are as follows:

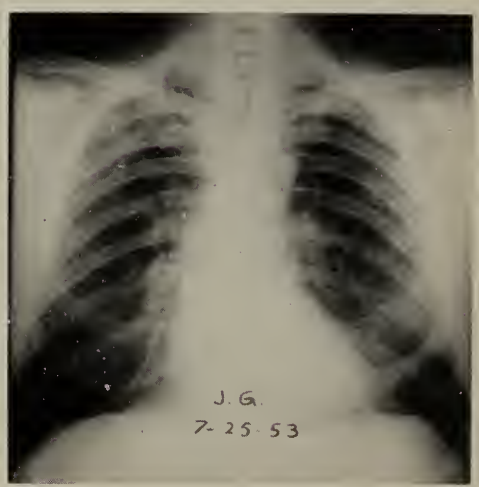


Fig. 13. Case 15 (J. G.) Table I. Chest x-ray of a sixty-one-year-old white man who worked for one year in a cement plant and for seventeen years in a furniture factory mostly on a sanding machine sanding furniture. Sputa positive for tubercle bacilli. A faint amount of crystalline silica was found in the anterior scalene node by x-ray diffraction analysis.

Case 1.—G. K., a fifty-two-year-old Negro, had worked for about two years in coal mines and steel mills and for two years in a foundry. A clinical diagnosis of silico-tuberculosis had been made. His sputa was positive for tuberculosis. Bilateral anterior scalene node biopsy was done and each time silica was not found by x-ray diffraction analysis.

Case 5.—M. N., a seventy-four-year-old white man, had worked in hard coal mines for ten years and in soft coal mines for fifteen years. His chest x-rays were compatible with a diagnosis of early silicosis. His anterior scalene node was negative for crystalline silica by x-ray diffraction analysis.

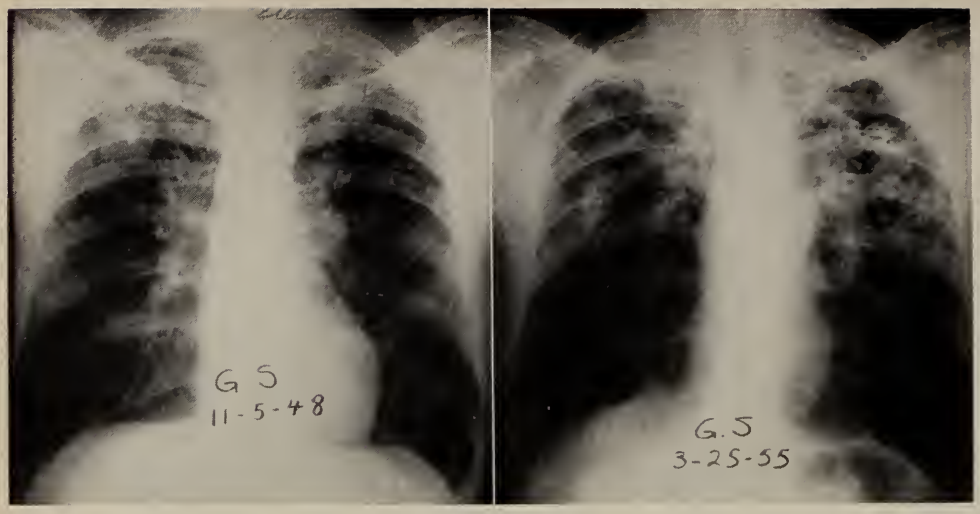
Case 6.—K. R., a sixty-seven-year-old white man, had worked in foundries for about 20 years. Chest x-rays showed severe fibrosis and emphysema. It would seem that this man should certainly have silicosis (he has sputa positive for tuberculosis) but his scalene nodes were negative for crystalline silica by x-ray diffraction analysis.

TABLE II. PATIENTS WHOSE ANTERIOR SCALENE NODES DO NOT CONTAIN CRYSTALLINE SILICA BY X-RAY DIFFRACTION ANALYSIS.

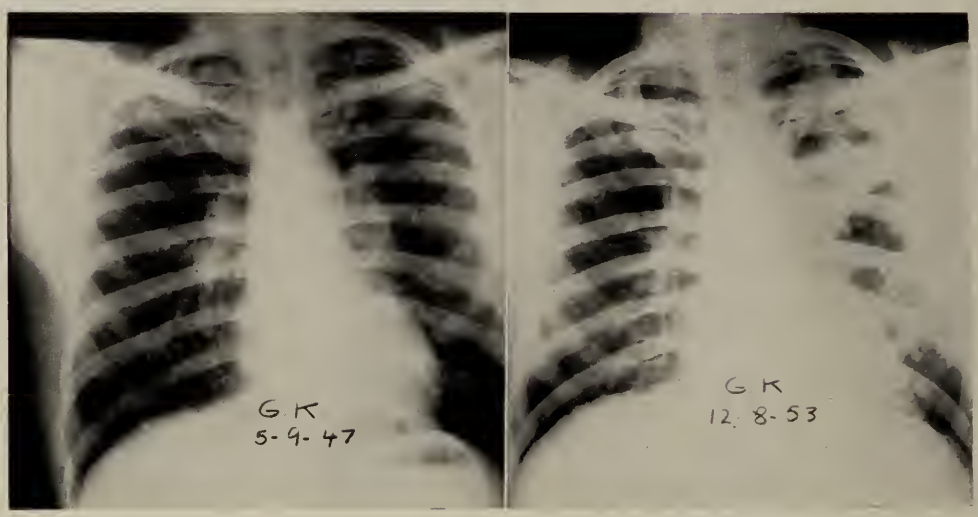
Patient	Exposure to Dust	Clinical Diagnosis	Remarks
1. G. K. 52 yr. old negro	Foundry worker for about 3 yrs.	Silico-tuberculosis.	Sputa neg. for T.B. 7-13-50 to 11-7-52; positive for T.B. 10-30-53 and 11-27-53. Neg. since. In San. 7-10-50 to 7-22-50 and 12-30-53 to 4-2-55. Now out-patient.
2. F. M. 27 yr. old negress	None	Sarcoidosis.	All sputa neg. for T.B. In San. from 1-29-55 to 4-23-55. Out-patient now. T.B. or Sarcoidosis?
3. C. Z. 44 yr. old w. m.	Foundry worker for 4 yrs.	Pulmonary tuberculosis.	Sputa positive for T.B. in Aug. '54; neg. since 8-2-54.
4. W. G. 46 yr. old w. m.	None	Pulmonary tuberculosis.	Sputa positive on Oct. '54 only. Neg. since. In San. 12-20-54 to 9-23-55. Now out-patient.
5. M. N. 74 yr. old w. m.	Worked 10 yrs. in hard coal mines; 15 yrs. in soft coal.	Possibly early silicosis.	Sputa Oct. '49 and Jan. '55 neg. for T.B. Out-patient.
6. K. R. 67 yr. old w. m.	Foundry worker for 20 yrs.	Tuberculosis; marked fibrosis and emphysema.	Sputa positive for T.B. from 4-11-50 to 10-3-55. In San. since 5-9-52.
7. J. R. 37 yr. old negro	Foundry worker for 6 yrs.	Pulmonary tuberculosis.	Sputa positive for T.B. since 5-12-54. In San. since 5-10-54.
8. C. W. 41 yr. old w. m.	None	Pneumonitis	Sputa neg. for T.B. in '54 & '55. Out-patient. Loeffler's syndrome (13% eosinophilia).
9. F. T. 60 yr. old w. m.	Foundry worker for 3 yrs.	Fibrosis and emphysema of lungs.	Sputa neg. for T.B. 9-27-51. Out-patient.
10. R. K. 56 yr. old w. m.	None	Enlarged left hilum.	No sputa studies. Out-patient.
11. V. M. 51 yr. old w. m.	None	Pulmonary tuberculosis.	Sputa positive for T.B. in June & Aug. '54; neg. since. In San. since 8-17-54.
12. J. B. 44 yr. old w. m.	Some buffing, polishing and fiber-glass exposure for yrs.	Pulmonary tuberculosis.	Sputa positive for T.B. 8-18-53 to 1-14-55. In San. Aug. 5, '53 to 9-5-55 A.M.A.
13. A. C. 31 yr. old negress	None	Patchy infiltrate in lungs of unknown cause.	Sputa neg. in Jan. & Feb. '55. Out-patient.
14. T. W. 60 yr. old negro	None	Pulmonary tuberculosis.	Sputa positive for T.B. 1-15-55 to 8-1-55. In San. since 1-13-55.
15. A. W. 25 yr. old negress	None	Heart disease.	Out-patient. Has loud heart murmer.
16. R. S. 50 yr. old w. f.	None	Enlarged hilar nodes.	Sputa in April '55 neg. Hospital employee.
17. S. V. 58 yr. old w. m.	Saw mill worker	Mid-line lethal granulomatosis.	All sputa neg. for T.B. Exposed in May '55. Autopsy—Mid-line lethal granulomatosis.
18. J. C. 33 yr. old w. f.	None	Sarcoidosis.	Sputa neg. for T.B. April '55. Out-patient. Sarcoidosis.
19. L. W. 32 yr. old w. m.	Factory engineer	Sarcoidosis.	Sarcoidosis. Out-patient.
20. C. B. 8 yr. old w. girl	None	Probably tuberculosis.	Gastrics neg. for T.B. in March & April '55. In San. 3-9-55 to 4-30-55. No change in mediastinal mass. On T.B. drug therapy as out-patient.
21. J. V. 32 yr. old w. m.	Welder for 4 yrs.	Possibly siderosis.	Sputa neg. for T.B. in Feb. '55. Welder by trade. Out-patient.

Failure to Secure Adequate Lymph Nodes

In two patients who probably have silicosis as gauged by the history and chest x-ray findings I was unable to find enough lymph node to be



Figs. 14 and 15. Case 16 (G. S.) Table I. Chest x-ray of a fifty-three-year-old white man who was a molder in a foundry for sixteen years. Sputa positive for tubercle bacilli. Crystalline silica was found in the scalene node on x-ray diffraction analysis.



Figs. 16 and 17. Case 1 (G. R.) Table II. Chest x-rays of a fifty-two-year-old Negro who had worked for about two years in dusty trades and then for about two years in a foundry. Sputa positive for tubercle bacilli. The clinical impression was silico-tuberculosis. Bilateral scalene node examination for crystalline silica was negative by x-ray diffraction analysis.

of any diagnostic value. In one of these men I did a bilateral operation (at different times).

Mediastinal Lymph Nodes

In twenty-two instances hilar or mediastinal lymph nodes obtained at routine autopsy or at operation were subjected to study. In fourteen instances crystalline silica was detected by x-ray diffraction analysis. This would indicate that submicronic crystalline silica is commonly present in the mediastinal lymph nodes of the general population. Since submicronic crystalline silica is so commonly present in the air one wonders at what particular point significant pathological changes commence in the lungs.

In the light of present information some additional work needs to be done on the relationship of particle size and pathology in the lungs. In the usual methods of dust counting now employed the minimum particle size which can be counted

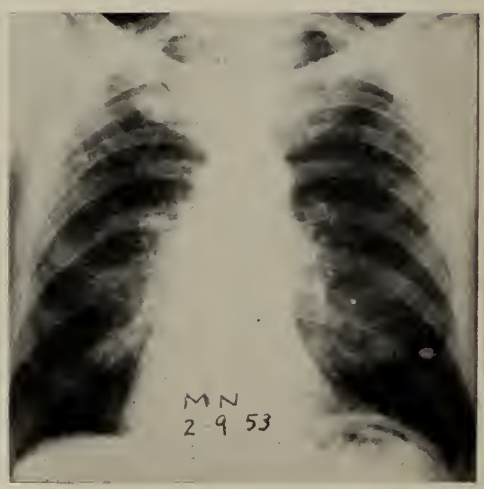
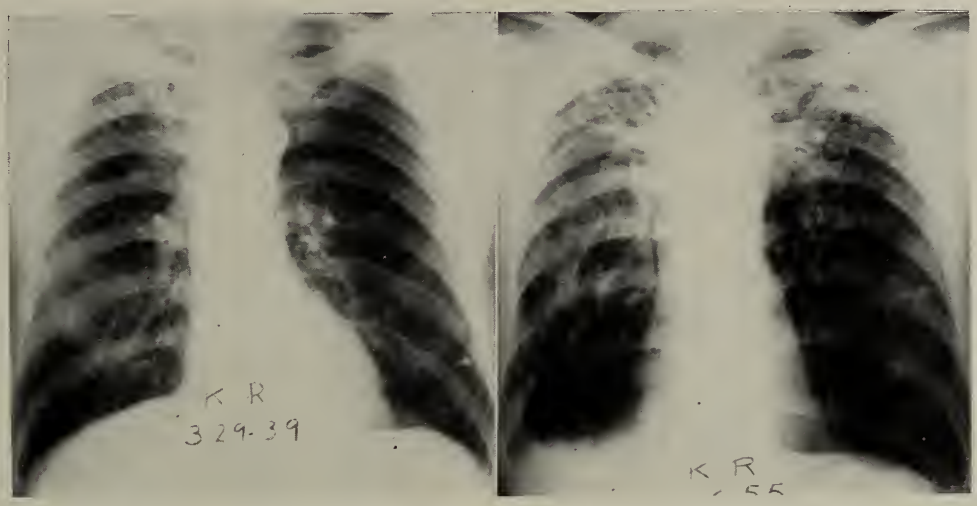


Fig. 18. Case 5 (M. N.) Table II. Chest x-ray of a seventy-four-year-old white man who had worked for ten years in hard coal mines and for fifteen years in soft coal mines. Sputa negative for tubercle bacilli. His scalene node was negative for crystalline silica by x-ray diffraction analysis.

under the microscope is in the order of ½ micron. It is now believed that the particles below ½ micron in size are more effective in producing fibrosis of the lungs. It may well be that the different chest x-ray pictures seen in cases of silicosis are due to different types of fibrosis due to a difference in the size of the inhaled particles.



Figs. 19 and 20. Case 6 (K. R.) Table II. Chest x-rays of a sixty-seven-year-old white man who worked for twenty years in foundries. Sputa positive for tubercle bacilli. The anterior scalene node was negative for crystalline silica by x-ray diffraction analysis.

Summary

This study indicates that when crystalline silica is found to be present in the anterior scalene nodes by x-ray diffraction analysis that this is strong confirmatory evidence for the existence of silicosis. This does not apply to the intrathoracic hilar lymph nodes. This crystalline silica detected in the anterior scalene nodes is submicronic in size and cannot be detected by cross polarization. In order to secure good results a deep cervical node (anterior scalene node) must be obtained and a standardized x-ray diffraction analysis technique should be worked out.

Acknowledgments

The clinical part of this investigation was carried out at the Sunshine Hospital, Grand Rapids, Michigan, with the encouragement of the medical director, H. D. Ireland, M.D.

The X-ray diffraction analyses were made possible through the co-operation of Albert E. Heustis, M.D., commissioner, Michigan State Health Department, the work being done under the direction of J. C. Soet, director, and D. E. Van Farowe, chief chemist, Division of Industrial Health of the Michigan Department of Health, Lansing, Michigan.

The microscopic and cross polarization examinations of the tissues were made by A. C. Payne, M.D., chief pathologist, the Blodgett Memorial Hospital, Grand Rapids, Michigan.

The bacterial studies were carried out under the direction of Grace Eldering, M.D., director of the Grand Rapids Division of Laboratories of the Michigan State Health Department.

FREE HOSPITAL SERVICE PROPOSED

Rep. Dingell (D-Mich.) is proposing free hospitalization for everyone over sixty-five who receives social security benefits.

Dingell said he would introduce a bill today to carry out his proposal.

Under Dingell's plan, the cost of sixty days' hospitalization in a semi-private room would be paid from the social security trust fund. Dependents of insured aged persons and survivors of insured persons also would be eligible for hospitalization under his plan.

Dingell estimated the plan eventually would cost half a billion dollars a year, but said it was financially possible because income from social security taxes has been growing faster than payments out of the trust fund.—*Detroit Free Press.*

Like Father, like Son."

Chlorpromazine in the Treatment of Chronic Psychotic Patients

By Alexander P. Dukay, M.D.
Ypsilanti, Michigan

THE progress in diagnosis and therapy of somatic disease has been tremendous during the past decade. Infectious diseases were eradicated by preventive immunization. The antibiotics and various hormones are the great benefactors of the suffering mankind today.

The therapeutic advances in psychiatry have lagged far behind those achieved in general medicine. The work and theory of Freud, Jung, Adler, Adolf Meyer, and Sullivan have greatly improved our understanding of human behavior. The discoveries and contributions of psychoanalysis have greatly facilitated the treatment of the psychoneuroses. Federn, Fromm-Reichmann, and Rosen have advocated psychoanalytical technique for the treatment of psychosis, but the results are rather discouraging. In the state hospital setting where the majority of the patients are psychotics, the treatment of this group of patients offers a great challenge to the clinical psychiatrist, and we shall limit our discussion in the present paper to consideration of psychosis. The therapeutic problem in psychosis remains still acute despite the introduction of various somatic and chemical treatment methods.

The first to advocate somatic treatment in modern times was Meduna from Budapest. He introduced metrazol shock therapy in 1933. This was followed by insulin coma in 1936, worked out by Von Sakel from Vienna. Cerletti and Bini from Italy added electro-convulsive treatment to the therapeutic tools of the psychiatrist in 1938.

The first to advocate sleep therapy was Wolf in 1901, then Klaesi at Berne, Switzerland, in 1922. In France, Richet and Jolly used tribromethanol. The Russians[5] have been practicing prolonged sleep therapy in the assumption that psychosis is due to exhaustion of the nervous system and putting the central nervous system to rest would result in a cure.

Parts of this paper were read at the bi-annual meeting of the Michigan Association of State Hospital and Clinical Physicians at Newberry, Michigan on May 27, 1955.

Dr. Dukay is associated with the Ypsilanti State Hospital.

History

Recent investigations have focused attention on the autonomic nervous system, the diencephalon, and the adrenal pituitary axis. What role the above structures play in the etiology of psychotic illness is a matter of great debate and investigation. It is an established fact, however, that in psychosis, particularly schizophrenia, we find many signs of a marked autonomic imbalance.

Delay, Deniker, and Harl[1] became interested in the work of Laborit[9] on the neurosympathetic system and on methods of artificial hibernation. They noted that artificial hibernation seemed to combine putting the nervous system to sleep with refrigeration of the organism. The authors mention that refrigeration and sleep cures have already been proposed in psychiatric therapy with various degrees of success. They stress not only the theoretical, but the practical difference between the therapeutic narcosis and artificial hibernation where the sleep is not the main effect but only contingent. In hibernation therapy, the main purpose is the relaxation of the excited neuroautonomic system without, necessarily, the sleep effect. Complete hibernation is not commonly used in psychiatry; and, in the majority of the cases, only pharmacodynamic hibernation has been practiced using a single neuroplegic, chlorpromazine.

Pharmacology

Chlorpromazine is 10(-3 dimethylaminopropyl)-2chlorophenothiazine hydrochloride. It is primarily a central nervous system depressant, a vagolytic, sympathaticolytic and adrenolytic drug. It also has a mild antispasmodic effect. As an ammonium compound, it readily diffuses into nervous tissue. It potentiates the effects of hypnotics, sedatives, narcotics, anesthetics, alcohol, and antispasmodics. The chief site of its action is the hypothalamus, the reticular substance of diencephalon and mesencephalon and to a lesser extent the ganglia and the peripheral nervous system. Laborit[9] speaks about "a synaptic breach between the cortex and the diencephalon effecting a kind of pharmaco-

logical lobotomy with resulting quieting of the higher centers." There is a marked difference between surgical and pharmacodynamic lobotomy. There are marked personality changes after the operative procedure with loss of drive, responsibility, and feeling tone. The chemical lobotomy does not result in a "minus" personality.

Therapeutic Uses

Chlorpromazine has been widely used with very favorable results in clinical conditions such as nausea, vomiting, intractable hiccoughs, management of intractable pain, in radiation sickness, in delirium tremens, in chronic alcoholism, and in the withdrawal treatment of drug addiction.

The French workers, Delay, Deniker, and Tardieu,[2] saw excellent results in manic states which were refractory to electro-convulsive treatment. They advocate two to four weeks of treatment to obtain favorable results in schizophrenia with agitation, aggressiveness and particularly where marked anxiety predominated. Catatonic stupor did not show any fundamental improvement in their experience.

Staehelin and Kielholz,[15] from Switzerland, saw remarkable improvement in acute catatonic schizophrenia and observed the improvement in chronic catatonia. They observed improvement in the manic as well as in the depressive phase of manic depressive psychosis. The authors stressed the fact that the most beneficial results are obtained where free-floating anxiety predominates.

Lehmann and Hanrahan from Montreal[10,11] reported about seventy-one and 283 psychiatric patients, respectively. They found chlorpromazine to be of specific advantage in the control of almost any kind of severe excitement including catatonic schizophrenia, schizo-affective psychosis, epileptic clouded states, organic-toxic confusional states as observed in uremia and senile psychosis. They saw particular benefit in manic and hypomanic states.

Winkelman[18] studied 142 patients including sixty-five psychoneurotics and twenty-one senile patients. The patients who exhibited severe anxiety and tension states responded especially well to the treatment. In senile patients, he noted that after three to seven days of treatment one-half of the patients became aggravated. However, the treatment was continued and dramatic beneficial effects were seen.

Kinross-Wright[6,7,8] found chlorpromazine a therapeutic advantage over electro-convulsive treatment in manic phases of manic depressive psychosis. He found in 251 patients the following results after a course of chlorpromazine: 55.8 per cent remission, 15.9 per cent much improved, 21.9 per cent improved, and 6.4 per cent unimproved. Most of the patients became more accessible to psychotherapy and would discuss their deep-seated emotional problems more freely.

Elkes and Elkes,[3] from England, reported on twenty-seven chronic agitated psychotic patients. These patients were used as their own control. Chlorpromazine and identical inert placebo tablets were alternately given over varying periods. Records were kept independently by the medical day and night nursing staffs. The results were evaluated in the retrospective examination of the records of each patient. Twenty-five per cent of the patients were considered to be definitely improved and thirty-eight per cent slightly improved. Patients in the affective group appeared to respond slightly better to the treatment than patients with schizophrenia. No significant improvement was noted in the three patients suffering with senile dementia. The results were subtle rather than dramatic. The patients became quieter, less tense, less disturbed by their hallucinations and more amenable to the suggestions and care of the nursing staff.

Winnik and L. Tennenbaum,[19] from Israel, reported on twenty chronically ill psychotic patients. Fifty per cent showed remarkable improvement, 25 per cent moderate improvement, and 25 per cent slight improvement after chlorpromazine therapy.

E. Weber,[17] from Switzerland, compared reserpine and chlorpromazine treatment on thirty-three patients. He found parenteral reserpine less painful and fewer side-reactions from chlorpromazine. The therapeutic results of the two drugs were about equal.

D. Goldman[4] reported in 597 psychotic patients a remission rate ranging from 1.0 to 34.1 per cent, depending on duration of illness and length of treatment.

The treatment results of the quoted authors are presented in Table I.

Material and Method

Our study consisted of forty-eight patients, twelve female, and thirty-six male. The selection was based chiefly on presence of symptoms of aggressiveness, motor and psychomotor hyper-

activity, and marked anxiety. Most of the patients were on the chronic wards and had undergone extensive somatic treatment in the past.

We tried to investigate the effect of chlorpromazine on the delusional material, hallucinations if present, hostility reactions, motor and psychomotor activity, and anxiety. Sleep and eating habits were observed by the ward personnel and recorded on a special chart which listed all possible complications. We endeavored to see each patient at least every other day. The patients followed regular hospital ward routine while receiving chlorpromazine. They were allowed to participate in the regular ward activities except that they had to be in bed and under observation for one and one-half hours after receiving each of the first eight intramuscular injections of chlorpromazine. The patients were allowed to lie down any time if they felt sleepy or light-headed. Urine specimens were analyzed for bile every other week. Blood pressure was checked daily for a week until we established that the patients were not hypotensive reactors. Complete blood counts were taken routinely every week in the beginning of our investigation. Later, this was discontinued because we saw no significant changes in the counts.

TABLE I. SUMMARY OF THERAPEUTIC RESULTS

Author	No. of Patients	In Percent					Remarks
		*0	1	2	3	4	
Lehmann	283					48	Manic Depressive, Manic
						39	54 Schizophrenics ill less one month
Kinross-Wright	30	42			48		Schizophrenics
	251	6.4		21.9	15.9	55.8	
Elkes and Elkes	27		38		25		
Tennenbaum	20		25	25		50	
Goldman	197	51.3		39.1	8.6	1.0	2 months or less treatment
	303	20.5		47.2	17.5	14.8	2 months or more treatment
	97	5.2		27.8	32.9	34.1	1954 admissions

*0—No Improvement
1—Slight Improvement
2—Moderate Improvement
3—Marked Improvement
4—Recovery

Dosage

We have been using chlorpromazine since July, 1954. At the beginning of our investigation, we used daily oral doses of 75 mg. up to a maximum of 200 mg. We soon found that this dosage level was inadequate, and we increased the dosage quickly to 600 and 800 mg. daily to obtain the desired quieting effects.

Chlorpromazine dosage must be individualized. Careful day-by-day observation of the patient is more useful than any rigid rule. Caution should be exercised in patients over sixty years of age. We start such patients with 25 mg. three times daily and increase the dosage every other day by 25 to 50 mg.

Hypertensive patients' blood pressure should be followed very carefully because a sudden marked drop might produce a coronary or cerebral thrombosis. We observed in one fifty-two-year-old, very hyperactive, hallucinated, male patient a sudden drop of blood pressure from 200/110 Hgmm to 120/80 Hgmm within two days after oral chlorpromazine treatment was instituted with 300 mg., daily. No complications were observed in this case, however.

We started patients on oral medication whenever possible. Unco-operative or very disturbed patients received trial doses of 25 mg. of chlorpromazine in 4 cc. of ¼ per cent procaine N/S intramuscularly as a starter dose. We increased the dose in four hours to 50 mg. every six hours. If no marked drop of blood pressure occurred, the third day we gave 100 mg. of chlorpromazine intramuscularly every six hours until the patient was willing to take oral medication. The blood pressure and pulse were checked, thirty minutes and ninety minutes after each parenteral dose. Generally, it was necessary to continue parenteral administration for two to three days before changing to the oral route. When substituting oral medication for parenteral, we increased the daily dosage by 100 mg.

We started patients on 100-mg. tablets orally three times daily, and increased this dose within a few days to the therapeutic level of 600 to 800

mg. daily. Only one patient's daily medication reached 1,000 mg. a day. Therapeutic level was maintained for five to six weeks. Then, the dose was gradually tapered off over a four-week period.

TABLE II. CLASSIFICATION AND DEGREE OF IMPROVEMENT

Improvement	Manic Depressives		Schizophrenias		Chronic Brain Syndromes		Miscellaneous		Total	%
	Female	Male	Female	Male	Female	Male	Female	Male		
No Change	1	—	1	10	—	1	—	—	13	27.1
Slight Improvement	—	—	1	1	—	3	1	1	7	14.6
Moderate Improvement	1	1	4	7	—	5	—	1	19	39.6
Marked Improvement	—	—	1	1	1	1	—	—	4	8.3
Recovery	1	1	—	2	—	1	—	—	5	10.4
Totals	3	2	7	21	1	11	1	2	48	100.0

The longest period of treatment was 180 days, and the shortest was four days. Two patients developed jaundice and had to be discontinued from treatment although one had shown marked early improvement.

In two schizophrenic patients with marked paranoid features, we had to discontinue chlorpromazine administration after sixteen days and twenty-nine days, respectively, because they became increasingly suspicious and resistive in taking the tablets. The first patient was on 800 mg., and the second patient was on 600 mg. daily. We were using 25-mg. tablets at that time, and this meant that the first patient had to take thirty-two tablets daily; and the second patient had to take twenty-four tablets daily.

Paranoid patients had to be watched very closely because they attempted to hide the tablets under their tongue. On several occasions, tablets were discovered hidden in the patient's pocket despite the vigilance of the nursing personnel.

Results

The following criteria were used for the various degrees of improvement:

1. Slight: Decrease in the intensity of disturbing symptomatology resulting in slightly better ward adjustment.
2. Moderate: Subjective improvement with the persistence of delusional material.
3. Marked: Disappearance of all subjectively disturbing symptomatology with minor residuals of psychotic material.
4. Recovery: The re-establishment of pre-psychotic psychic functioning.

Table II presents the result of chlorpromazine treatment in forty-eight patients including all diagnostic categories. While 10.4 achieved recovery, 27.1 per cent did not show any improvement.

At the first glance, this appears rather discouraging. However, if we take into consideration that all patients were "therapy fast"—were ill for many years and had received adequate somatic treatment and supportive institutional treatment without benefit—the result might be viewed with more optimism. It is, also, true that we have included in this report five patients treated only four to twenty-nine days because they remained very resistive towards oral and parenteral therapy or developed jaundice. It is noteworthy that when we started to use chlorpromazine, we first treated eleven patients for three months; only 9.0 per cent remained unimproved, 27.2 per cent achieved recovery. Later on, patients with extremely poor prognosis were started on chlorpromazine. Consequently, the recovery rate dropped by two-thirds.

If we consider the data from a slightly different viewpoint and group those showing moderate and marked improvement with the recovered, we find that 58.3 per cent were appreciably helped and 41.7 per cent showed slight improvement or remained unchanged.

Affective Psychoses.—We found chlorpromazine to be dramatically effective in cases of manic depressive psychosis, manic phase with euphoria, motor and psychomotor hyperactivity. Patients showing paranoid and/or depressive elements did not respond so favorably. In such cases, we combined chlorpromazine with electro-convulsive therapy. It is our impression that chlorpromazine is not effective in depressions, and electroconvulsive treatment remains the therapeutic choice.

Schizophrenias.—We treated patients showing symptoms of catatonic excitement by rapidly increasing doses of chlorpromazine. If they did not show a marked improvement after three weeks, we

added a full course of electro-conclusive treatment and continued to give chlorpromazine for an additional two-month period.

Many patients showing paranoid symptomatology did very poorly on chlorpromazine. They incorporated the drug into their delusional system. Their attitude towards the drug might represent their feelings toward the attendant or nurse giving out the medication or toward the physician prescribing the medication. The attitude of the ward personnel and ward physician toward the patients is of paramount importance.

We did not use chlorpromazine in conjunction with insulin coma. On theoretical grounds, we feel chlorpromazine replaces insulin coma therapy.

Complications

1. *Hypotension.*—Chlorpromazine has a hypotensive effect. This is more pronounced on abnormally elevated blood pressure than on normal blood pressure. Rea, Shea, and Fazekas[14] reported seven cases of acute hypotension in 300 patients. The treatment consisted of administration of 1 per cent phenylephrine hydrochloride by slow intravenous drip method after the patients were placed in a Trendelenburg position. Six of these patients recovered from the shock state, but the seventh patient died several days later with acute adrenal insufficiency. They recommend that not more than 25 mg. of chlorpromazine should be given intramuscularly at first, and the blood pressure should be watched for a one-and-one-half-hour period after the medication is given. If there has been no change or only a moderate fall in the blood pressure, the dose might be gradually increased to 100 mg. if necessary.

We encountered only one acute hypotensive reaction in this series. The patient, a forty-seven-year-old man with a chronic brain syndrome associated with syphilitic meningoencephalitis, had received a six-week course of parenteral and oral chlorpromazine in October and November, 1954, with moderate improvement. A relapse manifested by agitation, depression, attempts of self-mutilation and insomnia occurred three weeks after the discontinuance of chlorpromazine. Therapy was reinstituted with 100 mg. of chlorpromazine parenterally every eight hours. The patient went into acute shock four hours after the fourth dose. The shock was ushered in by profuse watery diarrhea, cold, clammy skin; and a rectal temperature of 96.8°. Blood pressure and peripheral pulse could not be obtained. Respiration was reduced to 10 per minute. The patient was listless but reacted to strong mechanical stimuli. He was placed in a Trendelenburg position and covered with warm blankets. Prompt vigorous treatment with 4 cc. of norepinephrine in 1,000 cc. 5 per cent glucose in distilled water intravenously resulted in prompt recovery without any complications.

2. *Jaundice.*—Jaundice is a very unpleasant complication of chlorpromazine treatment. Its appearance is not related to age, sex, physical condition, dosage level or route of administration. It appears generally abruptly with temperature elevation and grippe-like symptoms. Vague gastrointestinal complaints, nausea, and even vomiting may occur. Several days later jaundice becomes apparent with or without hepatic tenderness which lasts approximately three weeks. The liver function studies are similar to those of obstructive jaundice with elevation of serum bilirubin, elevated alkaline phosphatase, increased serum cholesterol concentration, and bile in the urine. There has been no significant abnormality of the flocculation test, serum albumin globulin ration, cholesterol esterification, prothrombin time, or of the glucose tolerance test. Elevated eosinophil count in the peripheral blood has, also, been noted in a few cases. Liver biopsy specimens reveal a characteristic picture of bile stasis in the biliary canaliculi with varying degrees of inflammatory infiltration. After recovery, liver function tests and liver biopsy specimen did not disclose any residual hepatic damage.[13,16]

We observed two cases of jaundice, an incidence of 4.1 per cent. In both cases, jaundice came on with grippe-like symptoms on the thirteenth and fourteenth day of treatment and cleared up within three to four weeks. We discontinued the drug promptly at the onset of the grippe-like symptoms and have not attempted to retreat these patients.

3. *Drowsiness.*—Drowsiness occurred in a number of patients. This side effect was alleviated by amphetamine preparations.

4. *Allergic Reaction.*—Allergic skin reactions have been reported mostly of the urticarial type and all have cleared promptly by adding antihistamine preparations to the therapeutic regime. We

encountered two cases of papulo-macular skin reaction which promptly subsided when 50 mg. of diphenyldramine 4 times daily was added to the chlorpromazine.

(a) *Contact dermatitis:* Personnel handling chlorpromazine solution reportedly[12] developed contact dermatitis. We did not see any cases of this complication. Strict handling of the solution avoiding any contact is prophylactic.

(b) *Photosensitivity:* We saw two cases of inflammatory skin reactions limited to the exposed parts of the body, the face, hands, and neck. The erythema subsided without peeling in four days. Antihistamine and nicotinamide in doses of 50 mg. three times daily are recommended for two weeks. Patients taking chlorpromazine should avoid intense prolonged exposure to sunshine.

5. *Agranulocytosis.*—Agranulocytosis has been reported recently in a few cases.[4] We did not encounter this complication.

6. *Parkinsonism.*—Parkinsonism has been reported as frequently and subjectively troublesome but objectively a minor side-reaction.

We have not seen any typical case of Parkinsonism with cogwheel mascular resistance and rigidity, pill-rolling tremor, steppage gait, and drooling of saliva. However, in five cases, we observed marked mask-like facies. The patients appeared, suddenly, much older and lacked mimetic expressions. One patient complained of difficulty in speech. The reactions occurred at a dosage level of 400 to 800 mg. daily. In none of these cases did we reduce or discontinue the drug because of the side-effect.

7. *Gastrointestinal Symptoms.*—We saw eight patients complaining of diarrhea and pyrosis. Symptoms were easily controlled by administration of Kaopectate 15.0 grams three times a day and Trisogel 15.0 grams after meal. Some patients complained of constipation. This responded well to 30 cc. of mineral oil at bed time. Three patients complained about the bitter taste when the tablet was allowed to dissolve in their mouth.

Contraindications

There are very few contraindications. Chlorpromazine is contraindicated in any type of inflammatory disease because it blocks the sympathetic defense mechanism of the organisms. This is of special significance in the elderly patient where pneumonitis might complicate chlorpromazine medication. Also, it should not be given in state of central nervous system depression such as barbiturate intoxication, acute alcoholic intoxication, or coma of any origin.

Caution should be exercised in regard to patients with known liver disease. In such patients, urine should be checked twice weekly for the presence of bile. Chlorpromazine should be promptly discontinued if bile appears in any urine specimen. Patients suffering from allergies should be watched carefully while they are receiving chlorpromazine therapy. Patients suffering from cardiovascular disease have to be under constant medical supervision because of the possibility of coronary or cerebral thrombosis.

Chlorpromazine versus Reserpine

We have treated four female patients with chlorpromazine who had received previously 2.0 mg. of reserpine orally, daily, for three months without any beneficial results. Two were classified as schizophrenic reaction, chronic undifferentiated type with obsessive compulsive symptoms. One was suffering from a chronic brain syndrome with mental deficiency with psychotic reaction. She showed extremely violent and destructive behavior. One patient with an involutional psychotic reaction manifested extreme agitation, depression, and constant moaning. All four of these patients showed improvement after six weeks of intensive chlorpromazine treatment. The improvement was slight in the involutional psychotic reaction, moderate in one of the schizophrenic patients, and marked in the other two patients. None of these patients achieved recovery. The last two patients were considered for lobotomy.

Summary and Conclusions

Chlorpromazine is a central nervous system depressant acting chiefly on the reticular substance in the diencephalon and midbrain. It alleviates anxiety in an unique fashion strengthening the ego in its effort of personality reintegration resulting in more adequate social readjustment. The degree of improvement is dependent on multiple factors. Just to mention a few: pre-psychotic ego structure, level of regression, persistence of external precipitating factors, and availability of supportive therapies.

We have presented a comprehensive review of literature appearing on chlorpromazine. The interpretation of therapeutic results ranges from cau-

tious expectations to enthusiastic optimism. The evaluation of the results lacks uniformity. What is regarded as "social recovery" by some investigators is regarded by others as "moderate improvement." Some investigators regard a decrease in the frequency of physical restraints as a criterion of improvement. We have never used physical restraints at the Ypsilanti State Hospital since it was opened twenty-four years ago.

We have treated forty-eight chronically ill, psychotic patients with various diagnostic classifications with chlorpromazine for an average period of ten weeks.

Individualization of dosage is important. The usual therapeutic dosage was between 400 and 800 mg. daily. Of the patients receiving the above treatment, 58.3 per cent showed changes ranging from moderate improvement to recovery; 41.7 per cent showed only slight or no improvement.

Recent reports[6,19] advocate a prolonged treatment up to nine months with dosages up to 3,000 mg. daily. Prolonged treatment with high doses might proportionally increase the favorable therapeutic results.

In a few cases, dramatic improvement was evident within three weeks. In these cases, the result was directly proportionate with the degree of drowsiness and unconditional acceptance of the treatment routine by the patient. In most cases, the results were rather subtle and gradual. A few patients became less inhibited and verbalized traumatic material freely.

Based on the literature and on our own observation, we believe that:

1. Drug therapy offers a tremendous advance in psychiatric treatment by rapidly relieving distressing symptoms and by alleviating anxiety in a unique fashion. Seclusions rooms, the so-called "padded cell," are rapidly becoming obsolete.

2. The therapeutic planing of psychosis should be based on dynamic understanding of the causative factors. Somatic treatment and drug therapy should be formulated according to presenting symptoms, i.e., anxiety, depression, elation, hostility, aggression, suspiciousness, withdrawal rather than according to diagnostic classification.

3. Chlorpromazine should be recommended in the treatment of marked anxiety, motor and psychomotor hyperactivity with or without euphoria, obsessive, compulsive symptoms, somatic delusions, regardless of diagnostic categories which might include organic brain syndromes, involutional melancholia, schizophrenic reaction with catatonic excitement, manic depressive psychosis, manic or hyomanic state, and psychoneurotic reaction anxiety state.

4. Reserpine is the drug of choice in the treatment of withdrawn, hostile, suspicious, resistive, and aggressive patients because of its euphorizing properties regardless of diagnostic categories which might include organic brain syndromes associated with arteriosclerosis, personality trait and pattern disturbances, schizophrenic reaction with catatonic stupor and/or paranoid type.

5. In depressions chlorpromazine has not been effective. Reserpine is contraindicated. Electroconvulsive treatment remains the treatment of choice. Chlorpromazine might be administered simultaneously with electro-convulsive therapy to prolong or prevent relapses. Agitated depressions are an exception and chlorpromazine treatment is recommended.

6. Combined chlorpromazine reserpine treatment should be recommended where one drug alone has not been completely satisfactory.

7. Drug therapy does not replace psychotherapy and supportive treatment procedures such as occupational therapy, recreational therapy, and "hospital atmosphere;" on the contrary, it mobilizes many regressed, "unreachable" patients for the above treatment facility.

8. Reserpine is preferred to cholorpromazine in cases where prolonged parenteral administration might be necessary because it is less painful and simpler to administer.

9. The supervision and administration of the drug place an added responsibility and work-load on the nursing personnel which is offset by the personal gratifying experience of seeing "hopeless" patients getting well.

Acknowledgment

Chlorpromazine 10(-3 Dimethylaminopropyl)-2 chlorophenothiazine hydrochloride was generously supplied by Smith, Kline and French Laboratories, Philadelphia, Pennsylvania.

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Anatomical Considerations in Surgery of the Gall Bladder

By Barry J. Anson, Ph.D. (Med. Sc.)
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GENERALLY speaking, good to excellent results are obtained nowadays in patients afflicted with disease of the biliary tract. In those cases which, unfortunately, must be recorded as surgical failures, the causes are structural hazards. The surgeon is confronted by such hazards from the moment the abdominal incision is made to the time when the last suture is placed in the wound.

Observations and Discussion

Even such obvious aspects as the patient's weight and height are initially important, since selection of an incision adapted to bodily configuration insures adequate exposure of essential anatomy in the region of the gall bladder.† Three examples will suffice to illustrate these relationships:

1. A long, narrow torso is usually associated with an elongated liver; and, as a consequence, with a gall bladder situated low in the abdominal cavity. A low right rectus incision, in such a case, will expose the essential anatomy without the necessity of dislocating the liver out of the abdomen and without injury to vessels and ducts.

2. For the patient with average torso, a right paramedian incision provides satisfactory exposure for exploration and manipulations essential to removal of the gall bladder, exploration of the common bile duct, or exposure to the duodenal ampulla.

3. In the case of the short, obese patient, a long oblique incision gives ample exposure directly over the anterior margin and inferior surface of the liver.

The full significance of the selections is realized when specimens of liver are studied. From even the most cursory examination of laboratory specimens, it becomes evident that surgical approach to the inferior surface of the gland cannot be a standardized maneuver; both shape and size are subject to great variation.*

Turning, now, to a consideration of more critical anatomical features, it may be said without hesitation, that surgical accidents which involve blood vessels and ducts of the biliary system may be either immediately fatal or result in prolonged disability.

Anticipating the presentation of information gained in our laboratory, it should be pointed out that three elements—common bile duct, hepatic artery, and portal vein—are regularly depicted as the typical contents of the free edge of the lesser omentum, where, by passing the index finger through the epiploic foramen into the omental bursa (lesser peritoneal cavity), the vascular contents may be pinched against the thumb. This maneuver is calculated to occlude the vessels—and so it does in those instances in which the disposition of the pertinent structures is, so to speak, "standard"; or, put in another way, all would be well were the human body built on an archetypal plan. Actually, as we all know, the structure in any organ system varies between widely separate limits; and relationships between neighboring elements of different systems show even more striking variation.

These circumstances demand consideration of departure from the supposed anatomic norm; and in order to acquire instructive information of this kind for the surgeon, large numbers of specimens must be studied. This can be done most accurately and exhaustively by the anatomist, since his examination of the subject need not be carried out hastily; then, as material is acquired, his

Read at the ninetieth annual session, Michigan State Medical Society, Grand Rapids, September 28-30, 1955.
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†These and other related features are instructively presented by Dr. Manuel E. Lichtenstein in *Modern Medicine,* August, 1955, pages 73-81.

*Illustrations supporting these and succeeding statements will be presented in the form of lantern slides based upon the author's *Atlas of Human Anatomy* (Saunders, Philadelphia, 1951), Anson and Maddock's revision (3rd edition) of Callander's *Surgical Anatomy* (Saunders, Philadelphia, 1952), and upon papers published and in preparation by the writer and his associates.

artist has time to prepare accurate pictorial records.

Cystic Artery; Origin and Course.—In surgical procedure in the region of the gall bladder, the cystic artery comes prominently into the operative field. This vessel is highly variable in origin and in course within the hepatoduodenal ligament.

Examples of origin of the cystic artery, encountered in 600 specimens, may be conveniently placed in four categories.

In those specimens which belong in a first (and most numerous) category, the cystic artery arose from a branch of the proper hepatic artery, from the latter at the point of division, or from the same vessel proximal to the point of bifurcation. In succession, and in the order of decreasing frequency, these are: from the right ramus of the hepatic proper in 415; from the latter vessel at the point of division in seventy-eight; from the left ramus in forty; and from the hepatic artery proper, proximal to the point of bifurcation, in twenty-three. Totally, 556 for the four near source-vessels.

To a second category may be assigned those specimens in which the cystic artery takes origin from the downward-directed vessel, the gastroduodenal artery, or the latter's branch, the superior pancreaticoduodenal. Origin from the more distant source is far less common (one case) than the nearer (seventeen instances).

In a third group belong those specimens in which the immediate source of the cystic artery matches the general pattern which occurs in the cases illustrated in the first category, but differs from them in the derivation of the parent vessel. The parent stem may be the superior mesenteric in each, but the hepatic artery itself may be either an accessory artery or a replacing artery, that is, present instead of a vessel of common type of origin. Together, these total ninety.

To the last, or fourth, category may be assigned those specimens in which the cystic artery is "moved," so to speak, toward the aorta. These have been observed in four types (twelve specimens in all):‡ from the right gastric (in one case); from the hepatic artery near the coeliac source (in three instances); from the coeliac itself (in two cases); and from the superior mesenteric (in six instances).

Cystic and Hepatic Ducts; Types of Junction.—We are accustomed to think of the cystic duct as joining the hepatic duct on the latter's right margin, and at an acute angle. This standard pattern did exist in approximately 64 per cent of cases. However, in 23 per cent, the two ducts followed a parallel course; in the remaining 13 per cent the junction was spiral (on either the anterior or the posterior aspect of the hepatic duct).

Hepatic Ducts; Multiplicity.—Familiar to all of us, too, are textbook figures which unfailingly represent the "common" hepatic duct as a channel formed by the junction of two ducts, one from each of the major lobes of the liver. Actually, there may be four or more (rather than two) which join close to the points of emergence from the porta of the liver.

Hepatic Ducts; Points of Emergence.—Equally bound to tradition is the textbook concept of the relation of the emerging hepatic ducts to the quadrate lobe. While it is true that the ducts emerge commonly (in 88 per cent of cases) at the apex of the quadrate lobe, departures from this arrangement are frequent enough (12 per cent) to be surgically significant. In some examples of this smaller group, the hepatic ducts may emerge closer to the gall bladder than to the "apex" of the quadrate lobe.

Hepatic Ducts; Extrahilar Course and Relations.—Despite the fact that variations in the extrahilar duct-system of the liver are less common than departures from the anatomic "norm" in the vascular constituents of the hepatic pedicle, these relatively infrequent "aberrations" are extremely important in surgery in the region of the gall bladder.**

Among the more dramatic variations are the following: absence of a true common hepatic duct, due to the junction of a right hepatic with the common bile duct; presence of an accessory hepatic duct which, after coursing around the artery descending from the right lobe of the

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‡To make a total greater than 600, owing to the fact that in some instances the gall bladder is supplied by two cystic arteries.

**These and other related variations are described and figured by the present writer and his colleagues in two articles published in *Surgery, Gynecology and Obstetrics* (vol. 85, 1947, pp. 47-63; vol. 94, 1952, pp. 669-686).

Classification and Treatment of Temporomandibular Joint Problems

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A DISCUSSION of treatment of diseases of the temporomandibular joint embraces everything from removal of a single source of trismus to surgical attack upon the joint itself. If an accidental movement of the lower jaw, such as a blow to the jaw or a yawn, produces enough irritation within the joint, trismus and otaligia ensue. The treatment is external elastic splinting, local heat and sedative drugs. If the origin is an abscessed tooth or infection of the ear canal, removal of these sources is the solution. If the joint changes are secondary to long standing malocclusion and improper action of the condyle, irreversible changes in the meniscus, cartilage and bone structures of the joint occur. These tissues cannot be improved, but restoration of balanced occlusion usually removes the source of stress and damage, so that pain and trismus are relieved. Fortunately, this type constitutes the largest fraction of the cases. In a recent series by Sanders,[14] sixty-six out of seventy-five were tabulated as symptom-free one year after occlusal restorations. This is a common achievement of many observers at this time, most of the credit accuring to the dentist who has balanced the occlusion.

However, what is to be done about the remaining fraction who still have symptoms? To whom does the remaining 15 per cent belong? It is not enough for the patient to be balanced by her perfectly competent dentist to millimeter accuracy, and when not satisfied to be sent by a friend to another competent operator, to repeat the entire program. If possible, the following similar and simulated pain conditions must be recognized.

1. Trigeminal neuralgia, and atypical toxic neuritis (commonly sought and recognized).

2. Cerebral vascular disease (pain fluctuates with stage of the disease).

3. Intracranial or extracranial tumors (parotid and condylar tumors, misleading when early).

4. Conversion neuroses (infrequent, but ingenuously mimic all pain effects demanding repeated changes, in occlusion, will change consultants indefinitly—hopeless prognosis).

5. Masseter tremor (obscure, when not accompanied by other muscle palsies—poor prognosis unless underlying emotional conflicts can be corrected).

Deducting the above uncommon reasons, after applying any indicated extraoral treatment, there still remains an arbitary number of cases in which structural changes perpetuate the symptoms. These are:

(a) Destruction of the meniscus, cartilage
(b) Bone erosion of condyle, tubercle and fossa
(c) Exostoses, usually of condyles
(d) Anklyosis, all stages, in addition to limitation of motion by trismus
(e) Loosening, all stages of subluxation

Treatment by Injection of Joints

Schultz and Shriner[15,16] attacked the hitherto difficult problem of subluxation of temporomandibular joints by injection of a sclerosing substance, sodium psylliate (sylnasol) into both joints, obtaining satisfactory results in 200 cases. The injections were repeated every two or three weeks until painful clicking or grating subsided.

With the advent of cortisone, its first intra-articular use gave disappointing results, no cases being improved. Hollander and co-workers[7], in 1951, made a comparative study of intra-articular injections of hydrocortisone into joints involved with active rheumatoid arthritis, making 178 treatments on fifty-one patients. Swelling, tenderness, and freedom of motion improved, disregarding pain records as unreliable. So great was the improvement that the study was expanded to 700 treatments on 129 patients, this time including oster-arthritis (degenerative joint disease), traumatic arthritis, gouty arthritis, and bursitis. The results were equally prompt and favorable. The

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Read before the Michigan State Medical Society, Grand Rapids, Michigan, September 29, 1955.
This investigation was supported and is being continued by the John Swift Fund.

beneficial effect of hydrocortisone was thus shown to be non-specific because it was effective in a variety of inflammations from different causes. The action is still unknown, but the work of Dixon and Bywaters[5] supports the assumption that the hydrocortisone suppresses the local reaction to irritants, stress, and trauma.

In the series of Hollander and others which followed, the injections were made into various movable joints, mainly knees, as well as into bursa. The first important use in the temporomandibular joint was reported by Pirkey[12] in 1955, reporting a series of 350 patients, treated over a two-year period. Pain was absent for an average of five and one-half months, with only fourteen of the series unimproved. It was significant to note that all patients whose bite was corrected remained symptom-free.

During the past year, all patients referred from various departments of the Washington University Clinic were conservatively screened, leaving out all neuralgia cases not proved to be of mandibular joint origin. Of those with positive data, twenty received intra-articular hydrocortisone injections into the temporomandibular joint. These are tabulated with pertinent physical findings and results summarized in Table I.

All patients treated by hydrocortisone injection reported partial or complete relief of pain, except the patient in Case 13, who is presumably developing trigeminal neuralgia on the left, after trigeminal root resection on the right side. The duration of relief from pain is not too significant in this group because the longest period since treatment is actually about six months. Glossodynia was relieved in Case 1 by the injection and was produced in Case 3 by it, the tongue pain lasting one day. The result was indeterminate in Case 14. One can assume that these were direct effects upon joint branches of the auriculotemporal nerve and the chorda tympani nerve reflexly or directly effecting sensations of pain in the tongue. Ten cases of glossodynia were reported from this clinic in 1935,[3] and numerous similar ones tabulated in two large series since that date. One patient receiving hydrocortisone without remarkable benefit had masseter tremor, further discussion of which follows.

Bilateral Masseter Tremor

A segment of cases with uniformly poor results from all types of treatment, present the common symptom of masseter tremor. Thirty* were observed during the past year. There was no problem of occlusion or the occlusion had been restored. Yet otalgia, radiating facial pains, tiring of jaw muscles, as well as local tenderness of mandibular joints were present, unchanged after treatment of any kind. Questionable relief followed injection of hydrocortisone in three persons, one insisting that the pain complex was increased by the injection. This one contradiction to the usual experience with intra-articular injection of hydrocortisone raised the question of reliability. At this point, the observation of masseter tremor was observed during casual palpation of the jaws. The cases were studied in Neurology Clinic by Drs. O'Leary and Kempinsky[11] who found none of the stigmata of general palsies or of senile tremor. They agreed that this muscle tremor originates on a functional or psychogenic basis, initiated at the subconscious level. The pathogenesis is not clear, neurological examination being negative. Since emotional overlay is a large factor in this condition, psychotherapy appears to hold promise in treatment. Meanwhile, in spite of failure of treatments directed to jaw structures, the patients without exception, are relieved by passive support, simple elastic splinting of the jaw and masseter muscle group. Short half-hour periods are more effective and more restful than longer ones.

Surgical Treatment

Surgical treatment of the temporomandibular joint is directed mainly to relief of painful crepitus, or to ankylosis of the joint. For irreducible luxations, Dufourmentel,[6] in 1921, concluded that extirpation of the meniscus was the most effective procedure. Alcohol injection into the masseter muscle had been used by Sicard with some success, and it was obvious that looseness of the anterior part of the capsular ligament was not as important as the deformed disc, which prevents the condyle from returning to its normal position in the glenoid fossa.

Numerous cases of temporomaxillary surgery were reported during the period of 1890-1930. The classic monograph of Dufourmentel[6] in 1929 reviewed all types of cases, myotonic trismus, arthritis, painful crepitus, fractures, and ankylosis.

*Twenty-two of these comprise a recent report[4] on masseter tremor, as an important basis of mandibular joint dysfunction.

TABLE I.

Patient	Past History	Local and X-Ray Findings	Course
Case No. 1 F. C. Age 51 Female 5-20-55	Burning of nose, right side of throat 2 years. Diagnosis (medicine 20) chronic anxiety state.	Joint tenderness bilateral, crepitus. X-rays show widened left spaces. Absent lower molars, burning on posterior ⅔ of tongue, right.	6-3-55 hydrocortisone, 25 mgm. injected into right tmj. 7-8-55 burning of right side of tongue much better, residual perioral prickling.
Case No. 2 T. W. Age 49 Female 6-3-55	Myomata of uterus, no operation.	Otalgia, right 2 weeks, intense. X-rays negative except right condyle is 20% larger than left. Right joint very tender.	6-3-55 injection with 25 mgm. hydrocortisone into right tmj. 7-8-55 entirely relieved after 3 days of facial stiffness.
Case No. 3 G. P. Age 42 Female 1-14-55	Multiple complaints, several abdominal operations. Dental overlays for 9 months gave excellent relief, then all headaches returned. Chronic anxiety state.	Otalgia, bilateral and occipital headache. Dental overlays removed by Dr. Sanders. 5-20-55 head pains remained the same, more intense on left side. Masseter tremor.	Hydrocortisone, 25 mgm. injected into left joint 6-10-55. Glossodynia, left, followed injection for 1 day. Recurred 2 weeks later, face hurt 7-15-55.
Case No. 4 E. C. Age 64 Female 4-22-55	Numerous complaints since 1945, very few findings. Otalgia, left, for several years.	4-22-55 X-ray: joints normal and both tender to palpation. Otalgia relieved by elastic splint to jaw, 2 mm. cork right side.	5-6-55 entirely relieved by elastic splint, hydrocortisone 25 mgm. injected into joint (left). 5-20-55 symptom-free.
Case No. 5 E. G. Age 53 Female 11-30-55	Since June 1954, jaw pops out of place, great pain in right ear.	Dr. Kempinsky: 11-12-54 neurological negative except pain in region of right tmj. X-ray: decreased range of condyle motion, bilateral trismus.	11-30-54 at first could not wear dentures, nor use elastic strap; not room for both dentures in mouth. 4-15-55 hydrocortisone 25 mgm. injected into right joint. 4-29-55 much improved, still some neuralgia in both tmjs. 6-3-55 pains only during rains and cool temperature changes.
Case No. 6 J. W. Age 35 Female 4-8-55	Numerous orthopedic and abdominal problems. Popping in left tmj, otalgia, headache, dizziness, occipital and vertex pains, left.	4-8-55 jaw opened with a left drift, increasing left sided otalgia on chewing. Both joints tender to pressure. X-rays: normal joints except increased density, left.	Elastic splint relieved pains almost completely, worn on jaws with 2 mm. cork, right. 4-29-55 steadily improved, 25 mgm. hydrocortisone injected into left joint.
Case No. 7 A. McC. Age 66 Female 4-15-55	"Tic" condition of jaws for years, domestic trouble, severe conversion neurosis (Haddock). No tenderness of tmjs, tremor of masseters and tongue. Negative neurological (Kempinsky).	4-15-55 began use of elastic splint to jaws, followed by less "catching" and each use was restful until about 6-10-55.	7-15-55 "catching" in left side of jaw began about 6-10-55 with pain and crepitus (left). Head pains radiated to left neck and shoulder, could not raise left arm. Hydrocortisone 25 mgm. injected into left joint.
Case No. 8 M. Q. Age 43 Female 5-27-55	Ventral hernia repaired 10-13-54, fistula in ano operation 1-10-53. Frontal and right temporal pain treated in ENT clinic. Otalgia deep behind right ear, crepitus both tmjs.	Elastic splint to jaws began 5-27-55 with 2 mm. cork within left side, with much relief. 6-10-55 hydrocortisone, 25 mgm. injected into right joint.	7-8-55 free of pain and crepitus; only return of symptoms when cool in evenings.
Case No. 9 E. T. Age 70 Female 7-8-55	Otalgia, tinnitus right, pains radiating to right throat 18 years. Moderate nerve deafness. X-rays show squaring of right condyle and restriction of forward excursion. Masseter tremor bilateral. Both tmjs tender to pressure.	7-8-55 elastic splint was used, admitted only slight improvement 7-15-55 on which date hydrocortisone, 25 mgm., was injected into right tmj.	Injection of right tmj with hydrocortisone relieved aural pains, but not completely. Left now hurt so hydrocortisone 25 mgm. was injected into left side.
Case No. 10 J. C. Age 72 Female 6-20-55	Diabetes, obesity, inability to open jaws for 3 years. X-rays: irregular right joint space, restricted motion.	6-20-55 the right tmj was injected with 25 mgm. hydrocortisone.	Much relieved by injection Balance of restricted motion, and peculiar "notching" of condyle, consider external surgery of joint.
Case No. 11 M. O. Age 47 Female 4-22-54	Left facial pain, 3-4 years. Drs. Maughs and O'Leary found no trigeminal neuralgia.	4-22-54 left tmj very tender to pressure. Elastic strap to jaw with 2 mm. cork right, very relaxing. 4-15-55 slight crepitus left, was much relieved 1 year ago by strap.	4-15-55 hydrocortisone 25 mgm. injected into left joint. 5-20-55 complete relief of all pain since injection of left joint. Following injection, left eye reddened and crop of herpetic spots appeared on root of nose, left.
Case No. 12 E. M. Age 60 Female 5-3-55	Complete dental restoration past year, otalgia left on chewing, so severe soft foods only are taken.	Tenderness of left tmj to palpation, X-rays show narrowing of left joint spaces, head of condyle irregular, diagnosed arthritic change.	Not improved by elastic splinting of jaw, used for 2 months; 7-20-55 hydrocortisone, 25 mgm. injected into left tmj. 8-16-55 completely free of pain.
Case No. 13 M. McC. Age 65 Male 7-19-55	Trigeminal root resection right, in 1928, again in 1942 with right facial numbness. Since then, chews entirely on left side. Intense pain left ear began 18 months ago, radiates to lower jaw and cheek, increased by chewing. Three renewals of dentures.	Occlusion perfectly balanced, left tmj tender to palpation. X-rays show normal tmj structures.	Hydrocortisone, 25 mgm., injected into left joint. No relief obtained, refused further treatment.
Case No. 14 D. G. Age 69 Female 7-6-55	Otalgia left 2½ years, glossodynia, left.	No tenderness of tmj. X-ray shows left joint space narrowed, condyle head hypertrophic, diagnosed arthritis.	Elastic fixation restful, improved all attacks of pain; 7-15-55 hydrocortisone 25 mgm., injected. Reported 7-29-55 feeling about same.
Case No. 15 N. C. Age 52 Female 6-6-55	Otalgia left, after extractions 4 years ago. Several changes of dentures. Some attacks of pain so severe cannot chew until it subsides.	Jaws overclose on inadequate dentures, joints tender to palpation. X-rays show normal bone outlines, right condyle displaced anteriorly. Elastic jaw strap promptly relieves pain.	Hydrocortisone, 25 mgm. injected into left joint on 6-6-55. Complete relief of pain to 8-9-55, sent for new dentures.
Case No. 16 K. G. Age 60 Female 3-21-55	Hypertensive, diffuse arterial disease.	Tenderness of both tmjs. X-ray shows no joint change, and fixation of right joint. Constant intense otalgia left, increased on chewing movement. Bilateral masseter tremor.	3-21-55 hydrocortisone, 25 mgm., injected into left mandibular joint. 4-10-55 all joint symptoms much improved but still some pain. Hydrocortisone 25 mgm. again injected into joint. 5-20-55 much improved, still left-sided cranial pain.
Case No. 17 N. S. Age 55 Female 7-22-55	Bilateral otalgia on jaw motion. Occlusion balanced 2 years.	Tenderness both tmjs. X-rays negative.	Hydrocortisone, 25 mgm., injected left 7-22-55. Much improved, right side injected with hydrocortisone on 9-9-55.
Case No. 18 R. R. Age 36 Female 7-14-55	Otalgia, left, radiating to lower jaw 8 months.	No upper molars left, tenderness both tmjs. X-rays negative except for evidence of loosening of joints.	Much improved by elastic splint to jaws, 2 mm. cork in right side. 7-29-55 25 mgm. hydrocortisone injected. Symptom-free 9-9-55.
Case No. 19 B. C. Age 64 Male 8-4-55	Osteo-arthritis of spine Otalgia left one year.	X-rays negative, only loosening of joints.	Hydrocortisone, 25 mgm. injected into left joint 8-4-55. No further otalgia. Occipital pain probably due to cervical arthritis.
Case No. 20 W. W. Age 30 Female 9-1-55	All molars extracted 10 years ago. Otalgia left radiates to occiput.	Bilateral tenderness of joints.	Hydrocortisone, 25 mgm. injected into left side 9-9-55.

tmj—temporo mandibular joint.

TABLE II.

Patient	History	Physical and X-Ray Findings	Course
Case No. 1 M. S. Age 36 Female 11-30-54	Sharp jabs of pain into left ear on chewing, moving jaw. Began 9-1-54.	Tenderness left tmj, limited motion of lower jaw, otalgia, left, on every motion of lower jaw. X-rays show rough areas on left condyle.	Elastic headgear gave little relief, course of B_{12} injections without improvement. Endaural meniscectomy, left, 2-8-55. Meniscus thin, 2 exostoses on lateral margin of condyle, removed. Complete relief until 6-17-55, formed cystic abscess in left canal, incised.
Case No. 2 N. B. Age 32 Female 8-31-53	Bullet injury to left tmj 10 years ago with complete ankylosis. Otalgia, left, when jaw is forced, but does not open.	X-ray shows oval defect in cortex (postoperative) above zygoma (left) and very dense area over left tmj. Numerous metallic spots show in the same area. Joint outline hard to visualize.	8-3-55 bony mass beneath left zygoma; head of condyle removed by endaural incision. Opening of jaw increased to 1 cm. Leakage of cerebrospinal fluid complicated recovery from surgery.
Case No. 3 C. L. Age 49 Female 10-28-54	History of general mild rheumatoid arthritis, treated at Barnes Hospital in 1952, much improved on myocrysin 12½ mgm. per week. Trismus began at time of sore throat in 1954.	Trismus, 50% restriction of jaw opening, improved at first on elastic strap, then intense otalgia, left on jaw movement.	Endaural meniscectomy, left, 3-5-55, joint space a fibrous mass replacing the disc. Scar tissue removed and condyle polished. 4-22-55 much improved, no pain, jaw opens almost to normal.
Case No. 4 R. G. Age 53 Female 4-22-55	Carcinoma of left tonsil 1953, treated with radon seeds. Broken right jaw and malocclusion since 1949. Necrotic lymph nodes, glossopharyngeal, sup. laryngeal nerves resected on left side after constant pain 1 year, no relief.	Otalgia, left, tenderness right tmj, X-rays show fixation of right condyle, head of right condyle bilobular and enlarged.	Endaural meniscectomy, right, 5-21-55; exostoses on edges of condyle head smoothed and contour of head reduced. Drug addiction determined 5-27-55. Slow healing of canal, complete 7-1-55. All pains and trismus much improved since surgery 7-29-55.
Case No. 5 M. K. Age 51 Female 2-9-55	Past 1½ years had soreness in right jaw on movement. Right lower third molar removed, onset of trismus, not relieved by balancing of occlusion. Otalgia, right on any unguarded movement of the jaw.	Opening of mouth limited to 1 cm. between incisors. Otalgia, right, on any movement, improved on elastic fixation of jaw. X-ray shows no excursion of right condyle on opening.	Arthroplasty, endaural, right 6-9-55. Complete relief of pain and opening of incisors increased to 3 cm. between incisors. Using Seavers myotonic exercises 7-23-55.

He described all earlier techniques and his own. Studies and surgical treatment by Kontjetzny[9] in 1921 had identified habitual subluxation, degenerative changes of the meniscus, and painful crepitus as a cycle; and that painful snapping of crepitus is the middle point between luxation and discus changes. Axhausen[1] in 1931 made prolific studies of these changes, devised graphic records of the crepitus phenomenon, classified luxations as menisco-temporal or menisco-condylar, crepitus as intermediate and terminal, and produced microscopic studies of all stages of disc pathology in ten cases. Dufourmentel and Axhausen employed the postoperative use of spring-elastic devices after meniscus excision to overcome long standing muscle contracture and to obtain normal mouth opening.

A variety of incisions anterior to the auricle were used by numerous authors to expose the joint, each devised to avoid injury to the superior branches of the facial nerve. At that point Axhausen improved the incision of Bockenheimer, which is a postauricular incision, transecting the external ear canal and elevating the upper part of the parotid gland to obtain complete exposure of the joint.

Norgaard,[10] in 1947, reported 113 cases studied by injection of contrast medium in the temporomandibular joint, correlating roentgenographic with operative findings in twenty-five cases. The operative group were done by Husted, by the method of Bockenheimer-Axhausen, twenty of which had resection of the meniscus, and five amputation of the condyle. In recent correspondence with Dr. Husted,[8] he stated that his series is now 150 operative cases, one half with arthrosis, treated with meniscectomy, the remaining half ankylosis, treated by condylectomy. Dr. Husted's series constitutes the largest group of persons treated by temporomaxillary surgery since the series of Blair[2] in 1914, which applied to 212 cases of ankylosis. Rongetti[13] reported three cases of meniscectomy recently, describing the use of endaural incision. This certainly simplifies approach to the joint and minimizes the chance of stricture of the external ear canal. The endaural incision was used in each of the five cases reviewed in Table II.

Comment

Temporomandibular joint problems fall into three general categories, those in which occlusal restoration permanently relieves pain symptoms, those receiving direct treatment of the joint and those whose symptoms simulate origins about the joint, for which no treatment of any kind is indicated.

It is axiomatic that occlusal restoration should be achieved before, or after all efforts directed to the joint itself.

The newest treatment to be used in joints of the body, weight bearing, fixed or movable, is intra-

articular injection of hydrocortisone. Its use in the temporomandibular joint is feasible during, or after dental reconstruction, with excellent results. It is of great practical value, and although still classified as a palliative measure, no adverse reactions have been noted in any case.

Contraction of masticular muscles occurs during years of abnormal jaw action. After surgery on the temporomandibular joint, re-education of the masticator muscle group may be done by:

1. Voluntary myotonic exercises (Seaver),
2. External elastic splinting to produce leverage within the jaws, or
3. Intra-oral spring applications for forcible opening of the jaw.

The number of cases of masseter tremor is relatively small, as compared to the enormous group of mandibular joint neuralgias successfully treated. However, as one would expect, no restoration of occlusion has been of value in any case where masseter tremor is present. If masseter tremor is observed, the prognosis after any treatment of joint or jaw position, is unequivocally poor.

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SURGERY OF THE GALL BLADDER

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liver, rejoined the common hepatic duct; the occurrence of an accessory hepatic duct which terminated in the cystic duct; presence of such a duct whose termination was the common hepatic duct.

Conclusions

Presented in this segregated way, the variations hereinbefore described tend to appear somewhat less critical than they actually are, since, in the structure of any individual patient, unexpected arrangements in the biliary duct-system may accompany equally unpredictable patterns of vascularity—even to the occurrence of a portal vein in a position anterior to the hepatic artery and the common bile duct, together with a cystic artery derived from a distant source and a supernumerary hepatic artery of large caliber.

This means, obviously, that there can be no substitute for full exposure of the extrahepatic elements of the so-called "triad" and of the accessory structures—which may be arteries, veins, or ducts, or these in combination.

Vaginal Delivery following Cesarean Section

By S. A. Cosgrove, M.D., F.A.C.S.
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THERE is a very definite chasm of thought and practice between two schools of American obstetricians, one of which believes with the utmost certainty and fervor that a woman once having been subjected to cesarean section should be sectioned again and again and again as often as she shall become pregnant after the first section. The shibboleth of this group is, "Once a cesarean section, always a cesarean section."

The other school believes that it is much better for many women even though they have had a cesarean section on one occasion, to deliver future babies if they can, by the natural vaginal delivery passage. This belief has been phrased by Schmitz as, "Once a cesarean section, *not necessarily* always a cesarean section."

Each practitioner supporting either of these postulates, adheres to his opinion with the devoted fidelity of any religious fanatic. I very much fear that any attempt on my part, or that of any combination of speakers representing one camp or the other, will fail just as signally to disturb the individual conviction of very many men, as would attack on such religious fervor of conviction.

Each school, of course, supports its belief by individual observation of material great or small; by theoretic considerations, some of which are categorically disputed by the opposite school; by a variety of statistics, which like all statistics are usually capable of varying interpretation, frequently on the basis of vituperative attack on their validity. In what I shall try to tell you today, I am taking my stand firmly with the school which believes that a woman who has had to have one cesarean section will not necessarily be compelled to have a repeat section with any or all of her subsequent pregnancies. This is not a Johnny-come-lately attitude. I have practiced it myself for many years, and in the last quarter century, the whole group represented by the staff of the Margaret Hague Maternity Hospital has followed it. The extent to which we have applied it to a very large material, if not justifying our practice, at least entitles it to a more or less respectful hearing. Our practice is followed rather largely by British authorities, by Latin-American authorities, and by such leading clinics in our own country as the New York Lying-In Hospital, The University of Texas Hospital in Galveston, Schmitz' in Chicago, and many other American authors. It is not shared by such an outstanding authority as Dieckmann, most of the authorities on the Pacific coast, and other specialists in all parts of the country.

Those who believe that a woman once sectioned should always thereafter be sectioned, point out that cesarean section scars rupture; that if they do, a very grave situation for the mother exists; that some of these women die; and that the babies nearly all do. They therefore insist that one has no right to "gamble with the lives of mothers and babies, and that the obstetrician has the responsibility of protecting both by the relatively innocuous election of cesarean section." Some of these statements are valid, and some of them are not. It is true that cesarean section scars occasionally rupture. The incidence is very very small. Dr. Robert A. Cosgrove found in relation to more than 117,000 live births in our clinic that there were twelve total ruptures and seven incomplete ruptures. Nearly all of the total ruptures occurred through cesarean section scars attending the classical or corporeal type of operation. The seven incomplete ruptures, in which the peritoneum covering the old scar was not involved and the conceptus not extruded into the mother's abdomen, did not jeopardize the babies, none of whom was lost. In the complete ruptures, one quarter of the babies died, instead of the 100 per cent mortality alleged against the occurrence of this particular accident. The fetal loss in women delivering vaginally after previous section is the general mortality of all vaginal deliveries, in the neighborhood of 4 per cent. There was no maternal mortality in connection with any of these nineteen ruptures. The theoretic argument so far, then, in relation to the rule of always resectioning cesarean section patients, resolves itself into the fact that the prin-

Read before the Michigan State Medical Society, Grand Rapids, September 29, 1955.

cipal danger of not doing so, that is to say, the danger to the mother and baby of the much-feared rupture is minimal, in that incidence of such rupture is small, that the maternal mortality incident to this accident is very small in all statistics, and that the fetal mortality is certainly not inordinate.

On the other hand, the use of repeat cesarean section at an elective time more or less prior to the onset of spontaneous labor is by no means innocuous. Robert Cosgrove found that in relation to the total number of repeat cesarean sections in our material, there were six maternal deaths, whereas there were no maternal deaths incident to vaginal delivery following original cesarean section, and no maternal death following the rupture of a scar of a previous cesarean section. The proponents of this practice insist that the uterus is incapacitated by an original section. How much more, then, is it incapacitated by repeated insults of the same kind. On the basis of this consideration, which is apparently recognized by such practitioners, they must resort relatively early in the history of multigravidity, to sterilization to prevent further repetition of this damage. This, of course, necessarily limits the fecundity of these women.

Nor is the fetal risk of the practice of repeat cesarean section negligible. Many reports deal with the almost inexplicable high fetal mortality of cesarean section *per se,* even in those cases in which the operation is not done for placenta previa, or abruption of the placenta, or other indication which of themselves determine fetal death. Moreover, elective repeat section necessarily is employed before the onset of labor. How may one accurately calculate the degree of maturity of any fetus. If one is not able to do so, then necessarily some of these feti are delivered early enough in gestation to constitute a serious threat to fetal survival due to immaturity. In our own complete ruptures, three occurred prior to the onset of labor, one as early as the thirty-fourth week, another at thirty-seven weeks. Certainly, in both these cases, a plan to reoperate a short time before the onset of labor would not have been in time to prevent these ruptures.

Those of us who subscribe to the practice of allowing a woman to attempt to have her baby by the normal passage in spite of once having had a section for whatever indication, do so in the belief that, on the basis of not only our own experience but that of many other leading clinics, cesarean section is broadly not as safe as vaginal delivery; the factor of risk is at least 2 to 1; that vaginal delivery does not limit the mother's fecundity; that prior to delivery in subsequent pregnancies, the mother's psychic approach to her forthcoming experience is generally very much better if she understands that there is a possibility of her *not* requiring another cesarean section; that women delivering by vagina are spared the hazards of abdominal operations and the more serious types of anesthesia incident thereto; their convalescence is smoother and more rapid; their hospital stay is shorter, as is their total disability; they have achieved physiological childbirth, to which no man-devised variant is superior.

In having made what I believe to be a strong case for the propriety of permitting women who have had a cesarean section to try to have their subsequent baby or babies by vagina, I am not advocating it as universal practice. In order to minimize the risks to patients of this practice, certain conditions are essential: first, they must be handled in institutions which are ideally equipped for the handling of sudden emergencies, with particular reference to rupture of the uterus. Such ideal institutional setups should include a staff at all times available of competent experienced obstetricians; of highly competent anesthesiologists; of wholly competent operating-room nurses; and a blood bank of almost unlimited capacity, with competent technicians always in attendance.

Moreover, each case must be individually and carefully studied for the potentialities of that mother as evidenced in her handling of her present labor, recognizing that even in the same mother every particular delivery is a new and different experience than she has ever had before. With reference to her history, her general health, present general physical condition and previous operation should be evaluated as carefully as possible. As pointed out above, we believe that a woman having had a low transverse type of uterine incision is more likely to escape calamitous rupture of the uterus than is the woman who has had the so-called classical type with the incision located wholly in the corporeal segment of the uterus, or the nearly equivalent so-called low vertical incision, which in nearly all cases is bound to be partly a corporeal-segment-invasion by the operation. A stormy and especially a septic course

following the original operation is perhaps to some extent indicative of poor uterine wound healing, thereby making the risk of rupture of the scar greater than in the absence of such post-operative history. The size of the baby should be evaluated as well as may be, realizing that this is most difficult to do accurately. Presentation and position are important. We would consider cephalic presentation and normal position favorable for vaginal delivery, other things being equal. In connection with this, careful estimation of the facility of accommodation of the presenting part to the inlet is of great importance. Also of very great importance is an estimation of the efficiency of the uterine muscular function and the equanimity of the patient's psychic status.

If all of these appear to be favorable, then her labor may be allowed to progress spontaneously and naturally under constant close observation. If in the presence of such favorable factors, there is consistently satisfactory and reasonably rapid progress in labor, with special reference to the accommodation of the presenting part to the inlet, she may be depended upon with a considerable degree of confidence to deliver by the normal passages.

As part of the history of the previous operation, the indication therefor is of some importance, but by no means of itself a finally determining factor. Thus, an original operation for "fetopelvic disproportion" does not of itself interdict attempting subsequent vaginal delivery. Of our own sampling of 500 consecutive cases, 414, by long odds the great majority of the original operations, were done for fetopelvic disproportion. Of course it may be objected that this assigned indication was inaccurate; that in a given pelvis that would justify operation for such an indication, the indication would remain unchanged in subsequent deliveries of babies not larger than that delivered by the original operation. We freely admit that theoretically this is true, but in our own hands at least, none of the original operations was done without more than a very adequate test of the capacity of the woman to deliver herself by vagina. All means of manual and x-ray effort to evaluate the size and configuration of the pelvis had generally been made.

However competent such estimate is, the fact remains that these women had proved themselves unable to deliver by the natural passage the particular baby that they were trying to extrude from their bodies. Everyone recognizes that besides these more or less absolute mechanical factors, there is the other type of mechanical factor concerned with efficient uterine contractility. This, in turn, may have a very definite relation to the psychic state of the patient, a most important part of which is fear of an important and untried experience. Perhaps "fetopelvic disproportion" is not the best phrase to apply to all of these cases. But it is certain, that at least in our hands, every patient originally so sectioned had proven her inability to properly engage the presenting part and to progressively advance toward successful vaginal delivery. Perhaps a new succinct phrase needs to be developed to express this idea.

At any rate, valid or not, the patients originally operated on for this condition were able to deliver subsequent pregnancies in 27 per cent of cases. Some of the babies so delivered were as large or larger than the babies originally delivered by section.

The percentage of women originally sectioned for other accidental intercurrent conditions, such as placenta previa, with 74 per cent delivering by vagina subsequently; toxemia, with 81 per cent delivering subsequently by vagina; abruption of the placenta with 80 per cent delivering subsequently by vagina; serve to bring the general average percentage up to 35.8 per cent for the whole group.

In the handling of these cases in which vaginal delivery is hoped for following prior section, in addition to the constant watchfulness which I have stressed, suitable blood for abundant transfusion should be provided as soon as they go into labor; staff counsel should be obtained; operating room personnel should be alerted to the possibility of urgent call on their services; if convenient, any desired form of clerical attendance should be provided early in the course of the labor rather than risk delay in emergency if that is negelected until the last moment.

Is a history of successful vaginal delivery either before or since the primary operation proof that the current effort to have the patient deliver naturally will be successful? By no means. We have all seen the cases of grand multiparae, perhaps with progressively larger babies with each pregnancy who at last reach the point of no longer being able to deliver their babies by the natural passage, and cesarean section is necessitated by the

failure of such effort in the current labor. Similar experience can also attend those women who at one time or another have had a cesearean section and who have had one or more successful vaginal deliveries either before or after the section. We recently saw two calamitous ruptures of the uterus in women who had successfully delivered by vagina following cesarean section. One of them had delivered four times by vagina following section, and on doing so for the fifth time, the scar of an original vertical section tore down through the entire length of the cervix and the patient almost bled to death.

Another very recent case was originally sectioned for cephalopelvic disproportion after having lost her first baby by a difficult vaginal delivery. In her next pregnancy, she had a premature delivery in her sixth month without incident, except that the placenta was partly adherent and had to be manually removed. There is no notation as to the relation of this adherent placenta to the original cesarean section scar. In her present pregnancy, she had an acute viral infection in her sixth month, went spontaneously into labor, and immediately following the second stage went into profound shock. Exploration showed that the placenta had attached itself to and through a thin, weak scar and to the posterior bladder wall. In neither of these cases did successful vaginal delivery save the woman from later rupture of the primary section scar. Moreover, the second case illustrates the fear that has been expressed by some authors and which I have myself not heretofor seen, of the danger of weakening of the scar by the placentation over it.

I have endeavored to show.

1. The general desirability of exploring the capacity of patients who have already had a cesarean section to deliver subsequent pregnancies by the natural birth canal.

2. That in order to do this successfully and with a minimum of risk, such management should be in properly equipped maternity institutions by competent obstetricians.

3. That each case must be considered as a wholly unique, carefully individualized pregnancy and labor

4. That labor therefore should be in every case most carefully and constantly watched, with special preparations made to meet unexpected emergency

5. That there are no dependable subjective symptoms nor objective signs which significantly indicate the danger of imminent rupture even after delivery; the only signal of rupture may be external bleeding or shock indicative of internal bleeding; confirmation of the diagnosis may sometimes be made by careful manual exploration of the cervix and endometrial cavity

6. That such accident attending vaginal delivery should be most promptly and boldly dealt with by laparotomy; the source of bleeding in these cases is sometimes from diffusely disseminated areas and most difficult to control even by total extirpation of the organ; in such cases there should be no hesitation in ligating the internal iliac arteries

7. That cases which have to be delivered under less favorable environmental circumstances or which fail to rapidly give promise of successful outcome of the vaginal delivery, should be resectioned; therefore no imperative dictum can be laid down requiring that every patient be given the chance to deliver naturally after having had previous section

8. That those practitioners who make a shibboleth of the dictum "once a cesarean section always a cesarean section" should realize that they are also following a practice which is by no means devoid of danger to both mothers and babies

9. That under some circumstances, it might well be to the patient's advantage to be transferred, if possible, from an unfavorable delivery environment to some other accessible institution where the facilities for proper handling are better

10. That one is led to indulge the hope that as American hospitals continue to elevate their standards, more and more of them will be able to offer patients such favorable environment for the proper handling of pregnancy and delivery as I have indicated.

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Vaginal Discharge

By Leon S. McGoogan, M.D., F.A.C.S.
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VAGINAL discharge is one of the common complaints of the female patient. This simple complaint often presents a challenge to the physician as if to dare him to uncover its etiology and to treat successfully and cure the patient of her disability.

The busy physician too often listens to the patient's complaint, reaches for the penicillin with one hand and prescribes a douche or vaginal medication with the other without carefully evaluating the history or examining the patient. What is required of the physician under these circumstances? The patient should have a careful history as to the duration of the discharge; its color; odor; consistency; presence of blood; its relationship to the menstrual period and to recent antibiotic therapy. There should be a local examination of the external genitalia and of the internal genitalia. Wet and dry smears, culture of the discharge, biopsy of any local lesions present, Papanicalaou smears, and urine examination are necessary.

Etiology

The etiologic factors of the origin of vaginal discharge may be outlined as follows:

Specific Causes

1. Gonococcus
2. Trichomonas vaginalis
3. Monilia

Non-specific Causes

1. Hormonal lack (senile)
2. Nutritional (Vitamins A-B-C)
3. Foreign bodies
4. Chemical and physical
5. Neoplastic
 (a) Benign
 (b) Malignant
6. Secondary processes higher in the general tract—Cervix, fundus and tubes.

No age group is immune to the complaint but it seems to be most common in the reproductive age. In the child the gonococcal infections, the monilia infections and foreign body discharges are for the most part most common. In the adult patient of the private patient status, discharges due to monilia, trichomonas and those associated with disease processes of the organs higher in the generative tract are apparently the most common. When a patient has been carefully studied and the cause of the vaginal discharge has been discovered then the physician can institute the proper therapy and set in motion the proper means to effect a cure.

Treatment

Gonococcal Infection. — Gonococcal infections have almost disappeared from my private practice, as I have encountered only one in the last five years in a comparatively large group of women. There are perhaps a number of reasons for the infrequency of gonococcal infections in the private patient. The introduction of the sulpha and antibiotic therapies have resulted in rapid cure and in reduction of the number of contacts. One may speculate that the use of the same therapeutic measures in the treatment of other body infections has probably cured some concealed cases as well. Many men have learned sex hygiene measures during their tours of duty in the armed forces and have carried this knowledge into their civilian life and thereby have reduced the number of cases. When gonococcal infection is present, a single dose of 600,000 to 1,200,000 units of penicillin is given. Should repeated cultures prove to be subsequently positive, the cultured organisms should be tested against the various known antibiotics and the proper antibiotic selected for further usage.

Trichomonas Infection.—Trichomonas vaginalis infections are characterized by rather thin, bubbly, yellowish green, odorous, highly irritating vaginal discharge. The vaginal mucosa in the acute stage is reddened with numerous small punctate hemorrhages and the mucosa is tender to examination. Wet smears will reveal the presence of the trichomonads. Many therapeutic measures have been employed with varying degrees of success. The most recent suggestion is that of Dr. Carl H. Davis who has recommended Vagisec. With the use of

From the Department of Obstetrics and Gynecology, University of Nebraska College of Medicine.
Presented at the annual session of the Michigan State Medical Society, Grand Rapids, September 28, 1955.

Vagisec, according to the Davis technique, better than 80 per cent of the patients who are non-pregnant have been cured with one course of treatment.

The technique is as follows: Expose the vagina with a speculum. Wipe the walls dry with cotton sponges and wash thoroughly for about three minutes with a 1 to 250 dilution of Vagisec liquid. Remove excess fluid with cotton sponges. Treatment is to be utilized every other day for six times. At the conclusion of the office treatment the patient continues under treatment at home for another forty days. The patient inserts one applicator of Vagisec jelly into the vagina each night and douches with Vagisec liquid (one teaspoonful to a quart of warm water) each morning. I have been impressed by this method of therapy and by the results in my own private patients.

One should not forget that re-infections do occur and they can occur from the patient's bowel, from the bladder and from her husband. These possible sources of re-infection must be treated.

Monilia Infection.—The most frequent specific vaginal discharge seen in my private practice is that due to monilia. It has been my impression that the frequency of moniliasis in the vagina has increased since the introduction of the antibiotics. The broad spectrum antibotics kill off the normal bacteria in the vaginal canal, removing the natural checks on monilial growth.

The discharge is white and as a rule is thick and curd-like, frequently adhering to the vaginal mucosa and causing pruritus vulvae. In addition to the pruritus the vulvar skin may be reddened with numerous scratch marks, and areas of small vesicles and secondary infection may be present. The vagina is frequently reddened, tender, and the discharge adheres to the vaginal mucosa but may be wiped clean with an applicator. Wet and dry smears of the discharge and cultures on Nickersons media will confirm the diagnosis. Numerous treatments have been suggested. The patient can be made comfortable by washing the vulva and vagina with phisohex, drying the structures and then painting the entire vaginal canal and vulva with a 1 per cent aqueous solution of gentian violet daily for five days. Subsequent treatment with soda bicarbonate douches and the local instillation of various jellies such as Propion-Gel or Caprylium jelly may effect a cure. The cervical canal is a frequent source of chronic recurring infection and must be treated with gentian violet at the time of the original therapy or cauterized with a small nasal tip cautery by the strip cautery technique.

If the patient is married, the husband frequently complains of penile itching or the presence of small vesicle-like lesions on the glands. The husband should be instructed to cleanse the penis thoroughly with soap and water daily and especially after intercourse to prevent re-infection of both his wife and himself. If vesicles are present, treatment with 1 per cent gentian violet is frequently effective.

The recent employment of Mycostatin with the broad spectum antibiotics may effectively reduce the frequency of vaginal monilial infections in the future. Mycostatin vaginal suppositories, which at the present time are being developed by Squibb and which will be available to the general medical profession, may prove effective in the treatment of existing monilial processes in the vagina.

Foreign Bodies.—Foreign bodies, such as pessaries, sponges and tampax in the adult, pins and other small objects in the child, may cause vaginal discharge. Vaginal examination of the adult may reveal the presence of the foreign body. As a general rule these can be removed easily. In some cases, it has been necessary to hospitalize the patient to remove a pessary that may have been present in the vagina for many years. Examination of the vaginal region of the child by x-ray may reveal a metalic foreign body but not rule out the non-metalic, which must be sought for, sometimes found only on careful examination under anesthesia using an endoscope as a vaginoscope.

Senile Vaginitis.—Senile vaginitis or estrogen-lack vaginitis occurs post-menopausal, presenting a discharge which is occasionally bloody. The vagina appears to be atrophic and thin with frequent punctate hemorrhages. Estrogenic creams or vaginal suppositories of estrogen transform the vagina to that corresponding to one found in the estrogen producing individual and, as a rule, all symptoms disappear. The effectiveness of the estrogen can be judged by the disappearance of symptoms and by the change in the character of the cells found in the vaginal smear.

Nutritional Vaginitis.—Nutritional lack of vitamins A, B and C results in the individual having a lowered resistance to infections and hence she

may develop a nonspecific type of vaginitis. Local hygiene and adequate nutrition result in cure.

Chemical and Physical.—Vaginitis may occur following the application of radium to the vagina or the use of chemicals in the treatment of vaginal discharge. Burns from Lysol and potassium permanganate are not uncommon. Discontinuance of the agent and the institution of therapy to prevent secondary infections and to promote healing, lessen the scarring and deformities.

Pathologic Processes.—Vaginal discharge may occur as a result of pathologic processes in the cervix, the uterus or the tubes. Chronic cervicitis should be treated by cauterization or conization of the cervix. Polyps of the cervix should be removed. Cervical carcinoma may, and usually does, become secondarily infected. The institution of radiation therapy for the carcinoma will cure the discharge on the one hand and alter its character on the other and frequently promote a vaginal discharge which is the result of the radiation therapy.

Uterine tumors such as fibroids, diseases of the endometrium such as tuberculosis and carcinoma, constrictions of the cervical canal producing uterine pyometra, diseases of the tubes such as carcinoma and intermittent hydrosalpynx may cause vaginal discharge of one sort or another. When one does not find an adequate explanation for discharge and its attending symptoms in the vagina, he is duty bound to investigate those organs higher in the generative tract and rule them out as possible sources of the discharge.

Summary

A review of the problem of vaginal discharge has been presented. Its method of study, its etiology and its treatment have been discussed. Monilia infections have become more frequent since the institution of antibiotic therapy. The patient who has once developed a monilial infection following the use of broad spectrum antibiotics should be warned that recurrence of the infection is possible with subsequent use of antibiotics and that she should be protected with the incorporation of a safe and effective antifungal antibiotic. Gonococcal infections are not as frequent in private practice as formerly, due to the effectiveness of the sulpha and antibiotic therapies, promoting rapid cure and thereby decreasing the number of contacts. Monilial infection in the child is frequent and is treated the same as the adult with instillation of 1 per cent gentian violet into the vagina daily for five days. Foreign bodies in a child are one of the most common causes of vaginal discharge and can be easily located by employment of the endoscope as a vaginoscope. Chronic cervicitis, uterine fibroids and endometrial tuberculosis, endometrial carcinoma, stenosis of the cervix with resultant pyometra, hydrosalpynx of the tube and carcinoma of the tube may be the source of discharge above the level of the vagina, and their possible presence should always be suspected when explanation for the discharge cannot be found in a study of the vagina.

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8 Clifton Place

Single versus Multiple Lead Electrocardiograms as a Screening Test

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IN 1952, Dawber and co-workers[1] reported in *Circulation* a study of 2,000 records comparing multiple and single lead electrocardiograms as aids in the detection of heart disease. Their impression was that lead 1 alone was the method of choice for electrocardiographic screening because it was simple and convenient to record and it classified correctly almost as many normal individuals as did the twelve-lead electrocardiogram. At that time I was investigating similar techniques for potential screening procedures and felt it would be important to know in what situations the single lead might be misleading. Therefore, a different aspect of the same problem was studied. Instead of comparing lead 1 and the twelve-lead electrocardiogram with the final clinical diagnosis as did Dawber, I compared the interpretation of lead 1 with the interpretation of the twelve-lead tracing.

In a recent issue of the *Journal of the American Medical Association,* Weintraub[2] reported that in 200 abnormal twelve-lead electrocardiograms, lead 1 was normal in 26 per cent and implied that lead 1 alone is not a satisfactory method for mass screening of heart disease. Since my data are so closely similar to those of Weintraub, they are being reported at this time in confirmation of his findings. However, it is necessary to stress that neither Weintraub's findings nor mine militate in any way against the opinions expressed in Dawber's paper since different aspects are involved. In fact, the data in this report confirm Dawber's opinions as well, since in 95 per cent of the cases in my series the interpretation of lead 1 alone coincided with that of the twelve-lead electrocardiogram. Thus, lead 1 is almost as good at classifying the electrocardiogram as is the twelve-lead tracing.

Whether or not one believes the electrocardiogram is a good screening method for the detection of heart disease, or indeed whether screening programs in general are of public health value, depends somewhat on one's personal experience and philosophy. The major detriment of screening methods in my opinion is the false sense of security which normal findings tend to inculcate and it is not necessary to review here the frequency with which normal electrocardiograms are encountered in patients with heart disease.

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Material and Results

The material consists of electrocardiograms taken in an eight-month period in 1952 on 2,100 consecutive patients attending an out-patient diagnostic clinic in Detroit (the Health Institute). Patients were referred for electrocardiograms either as part of a periodic medical examination or for additional evaluation of clinically detected cardiovascular abnormalities. Routinely, twelve leads were taken; standard leads, a V leads, and leads V_1 through V_6. (Additional leads such as high V, back, ensiform, abdominal, and V_R leads were taken when indicated, but these supplementary leads were not considered in this study).

Separate interpretations were made of lead 1 and of the twelve-lead electrocardiogram. Criteria for normalcy of wave amplitude, direction, and contour for lead 1 were essentially those described in Table II of the paper by Dawber et al, and the interpretation of the twelve-lead electrocardiogram was in accordance with currently accepted criteria. The designations "normal," "abnormal," and "borderline" were used for interpretation and classification in both groups; i.e., lead 1 alone and the twelve-lead tracings. For purposes of the study, we were interested in electrocardiograms in which there was a difference between the classification of lead 1 and that of the twelve-lead curves. If the discrepancy resulted from the fortuitous occurrence of premature contractions, a paroxysmal arrhythmia, or intermittent conduction defects in leads other than lead 1, thus leading to a classification of lead 1 as normal and the twelve-lead curve as abnormal, the electrocardiogram was not included in the discrepancy group since such

occurrences are merely a function of the longer time involved in taking the twelve-lead tracing.

The twelve-lead curves were distributed as follows:

Normal	1,689
Abnormal	389
Borderline	22

In the normal twelve-lead electrocardiograms there were twelve instances (0.7 per cent) in which lead 1 would have been classified as abnormal by the criteria mentioned. In each case this was due to right axis deviation and other changes secondary to vertical electrical position of the heart.

Of the twenty-two borderline twelve-lead electrocardiograms, eight (36 per cent) exhibited a normal lead 1. In the 389 abnormal twelve-lead electrocardiograms, there were ninety-four instances (24 per cent) wherein lead 1 was normal. The discrepancies occurred in tracings exhibiting one or more of the following abnormalities:

ST-T changes of non-specific origin	28
Old or recent posterior myocardial infarction	26
Left ventricular hypertrophy	21
Old anterior myocardial infarction	10
Incomplete right bundle branch block	7
Right ventricular hypertrophy	4
Digitalis effects	3
Pericarditis	1
T wave changes of hyperpotassemia	1
Intra-auricular conduction defect	1

Summary and Conclusions

In a group of 2,100 twelve-lead electrocardiograms, twelve (0.7 per cent) of the normal tracings, eight (36 per cent) of the borderline tracings, and ninety-four (24 per cent) of the abnormal tracings exhibited a discrepancy between the interpretation of lead 1 alone and the interpretation of the twelve-lead curve. On the other hand, using these figures differently, in the entire group of 2,100 cases, only 114 tracings (5.4 per cent) exhibited this discrepancy. Two conclusions thus seem warranted:

1. In abnormal electrocardiograms, a normal lead 1 occurs too frequently to warrant the use of the single lead tracing as a diagnostic measure. This assumption could have been made on an *a priori* basis since there are few today who would argue against the superiority of multiple leads.

2. Since in almost 95 per cent of all curves lead 1 accurately classified the electrocardiogram, the single lead could justifiably be used as screening procedure.

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Generalized Eczematoid Dermatitis with Severe Alopecia due to Food Sensitivity

Case Report

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IN recent years, numerous observers[1-5] have commented on the importance of foods as one of the causative factors in eczematoid dermatitis. As an additional instance of such allergy, an unusually severe and disabling case of generalized dermatitis of six years' duration, which required lengthy periods of hospitalization, is herewith reported. The dermatitis subsided dramatically with the elimination of milk and tomatoes from the patient's diet.

Report of Case

R. K., an eighteen-year-old, single, white woman, was seen on June 28, 1954. Examination revealed a generalized, scaly, erythematous dermatitis involving the entire skin except for the palms and soles. The scalp, posterior-auricular areas, eyebrows, eyelids, pubic area, groins and axillae displayed varying degrees of oozing, crusting and pustulation; there was a foul, musty, offensive odor. Alopecia involving one-half the scalp was present. Three linear scars were present on the right breast. Blood pressure was 120/80, pulse 82. Physical examination, other than the skin findings, was essentially normal.

The history of the present illness is as follows: Six years previously, in the summer of 1949, the patient suffered a laceration of the scalp when she struck her head against a low ceiling beam. The wound was washed daily for one week with a strong laundry soap and apparently became secondarily infected. She was taken to her family physician who gave her a series of penicillin injections and an ointment. In a few weeks the dermatitis became generalized. There was an associated pruritus of marked severity. The patient was hospitalized for three weeks with partial improvement in the dermatitis. She continued treatment at home for two weeks and then sought medical attention from a second physician. He also gave her penicillin injections, which on this occasion, in conjunction with the use of various ointments, caused the dermatitis to involute.

In January, 1950, the dermatitis reappeared to involve the entire skin, and the patient was hospitalized at a second institution on March 24, 1950. After two weeks, she was discharged from the hospital with partial improvement. Throughout 1950, minor exacerbations of dermatitis occurred. A severe flare-up caused her to be hospitalized for the third time on November 29, 1950. The dermatitis failed to respond until ACTH therapy was used for a period of two weeks. The patient was discharged to the out-patient department on January 19, 1951. There she receeived semi-weekly injections of liver extract for one month with partial improvement. After a few months, the dermatitis gradually increased in severity and the hair of the entire scalp was lost. The patient was admitted to a third hospital on June 29, 1951, where after two months of soothing therapy, the dermatitis subsided and the hair of the scalp returned. Again the dermatitis recurred shortly after discharge from the hospital. Since that time, the patient has had four additional periods of hospitalization at two other institutions ranging from six months to one month in duration.

In addition to the eight periods of hospitalization, she has made frequent visits to dermatologists and general medical men from whom she received x-ray therapy, cortisone, ACTH, vitamins, antihistaminic drugs, sedatives and innumerable external medicaments. On November 30, 1953, she was hospitalized for incision and drainage of an abscess of the right breast. Among the many diagnoses which she received were generalized moniliasis, neurodermatitis, and seborrheic dermatitis with a prominent psychogenic overlay. Prior to the onset of the patient's present dermatological condition, she had experienced no skin troubles or other manifestations of allergy. There was no family history of skin disease or allergy.

Following her first visit on June 28, 1954, the patient was started on a regimen of weekly injections of sodium thiosulfate solution, intravenously, colloid baths, benadryl and 3 per cent vioform ointment. On July 23, 1954, an abscess developed in the right breast, which discharged spontaneously following the use of continuous compresses of magnesium sulphate solution. Throughout the month of August, the dermatitis persisted with little change.

On August 27 the patient was given an elimination diet. She was seen one week later and a slight but definite improvement in the dermatitis was noticed. Additional foods were added to the diet at three-day intervals. Continued improvement was shown until milk was added. The patient stated that within a few hours, her skin became redder and pruritus was increased. A similar reaction of less severity occurred when tomatoes were added to her diet. With the avoidance of milk and tomatoes gradual improvement in the dermatitis was maintained. Rapid regrowth of the scalp hair followed. By November 12, 1954, the patient's appearance was sufficiently improved for her to take on a full-time job.

On December 14 the patient drank a glass of milk.

Within two hours this was followed by an attack of pruritic erythematous blotches on her trunk and arms. The ingestion of tomato juice on December 20 produced a similar but less intense attack of dermatitis. The patient was seen again on January 8, 1955. At that time she presented scaly erythematous patches of dermatitis on her face and ears. The eyelids revealed oozing and crusting. There was present a diffuse, poorly defined, oozing, erythematous dermatitis in the axillae and on both breasts. The patient stated that she had been doing very well until she had eaten spaghetti, which was very rich in tomatoe sauce, four days previously. Her present attack of dermatitis began a few hours later and had been growing progressively worse. Treatment was again given with weekly injections of sodium thiosulfate solution, benadryl and vioform cream. The dermatitis gradually subsided thereafter. The patient was seen on January 29, 1955. The dermatitis had involuted almost completely except for a faint erythema of the axillae and antecubital areas. The patient has remained well since then.

Comment

A discussion of this case raises two points which are highly controversial and closely interrelated. First, how frequently is food allergy a factor in the etiology of eczematoid dermatitis, and secondly, what is the best diagnostic procedure to determine the causative foods if present? Flood and Perry[2] reported that the causal role of foods was demonstrated in twenty-nine of thirty cases of recalcitrant vesicular eruptions of the hands. Winston and Sutton[3] found thirty cases in 388 cases of eczema of the hands which cleared up with elimination of allergenic foods. In regard to eczemas of areas other than the hands, Livingood and Pillsbury[4] presented data on twenty-six patients in whom they believed foods represented a primary etiological factor or a significant contributory factor; they estimated that food allergy seemed to be of primary or secondary etiologic significance in about 6 to 8 per cent of their clinical material. Guthrie and Mandel[5] reported that ten of a total of 196 cases of eczematoid dermatitis hospitalized in one year were due to food allergy.

In contrast to these reports, many dermatologists believe that if food allergy causes eczematoid dermatitis of the hands or elsewhere, it occurs so infrequently that it can be ignored as a possibility. This low index of suspicion of food allergy is well illustrated by the present case report. The patient had been under the care of four excellent dermatological staffs. She recalls no instance of being questioned about foods or having any attempts made with diagnostic procedures to determine possible food sensitivity. This is all the more remarkable in that the patient informed every examiner that she believed tomatoes caused a flare-up in her dermatitis.

This apparent diversity of opinion among dermatologists can well be explained by the difficulty in determining food sensitivity not only in eczematoid dermatoses but in non-dermatological conditions as well. The crux of the problem lies in the lack of a generally accepted, satisfactory, easily performable diagnostic procedure. Skin testing, for ease of performance, would appear to be the method of choice, but many allergists[6] agree that the results of cutaneous tests may be highly misleading and of limited value in food allergy. Randolph's[7] case of milk sensitivity causing headaches of such severity that two surgical operations were performed for relief of pain presented negative skin tests. Allergic re-evaluation by means of elimination diets and trial diets demonstrated the causal role of milk in his case. Elimination and trial diets have proven the most conclusive means of detecting food allergies in the hands of dermatologists who have reported on this subject. But these approaches are also full of pitfalls and the results are often confusing. Some investigators[2] believe that only by hospitalization can a patient be properly followed to evaluate the findings of these methods.

To return to the question of frequency of eczematoid dermatitis from food sensitivity, an estimate based on reported studies is that about 5 to 10 per cent of such eczemas have a food factor of some significance. Consequently, it appears advisable that in any protracted case of eczema which has not responded to acceptable therapeutic procedures, a search for a possible food allergen is indicated. In the present case, such a search proved particularly rewarding.

Conclusion

1. A case of generalized, chronic, disabling and disfiguring seborrheic dermatitis of six years' duration in an eighteen-year-old, white, single woman, which cleared up with the avoidance of milk and tomato products, is reported.

2. The difficulty of ascertaining the presence of food allergy with present diagnostic procedures is discussed.

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The Role of the Family Physician in Psychiatric Problems

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MEDICINE at mid-century is drifting more and more toward a unitary concept of health and disease in which the patient is viewed not only in the light of pure science but also against the backdrop of his environment and as a contributor to his illness as well as its subject and its object. Health and disease are now seen as modalities of life determined by forces and stresses arising from within and without the organism.

This is by no means a new orientation for medicine. Until a century ago, the physician was quite conscious of the general condition of the patient in relation to his environment. Because of the inadequacies of his scientific knowledge then, the doctor had to rely mainly upon his own observations of his patients and their reactions to illness in order to provide assistance and comfort. With the advances in medical knowledge, however, in the latter part of the last century there was a movement away from this personal focus to a growing pathology that could be demonstrated, to an absorbing interest in the delineation of disease entities in classification and prognostication and in the search for causes and cures.

This new movement brought with it tremendous changes in medical knowledge and practice. Epidemic, infectious and other devastating illnesses of the past were gradually brought under control so that doctors found themselves devoting less time to the dramatic treatment of the acute conditions that used to decimate the population and much more to chronic, intermittently disabling, though not rapidly fatal, disorders. Thus, while from the point of view of preservation of life the great revolution in medical science has yielded an abundant harvest, at the same time it has brought with it certain problems and it is our intention to consider some of these problems in this presentation.

As disease has changed, so too has the practice of medicine changed and, as the family doctor examines his practice today, he finds that the chronic, intermittently disabling illnesses which he is called upon to treat are frequently those of emotional disorder, psychosomatic illnesses and geriatric problems. It will be noted that each of these illnesses have psychiatric connotations and one can say with little fear of contradiction that psychiatric problems are not eagerly sought after by physicians in general practice. Despite his feelings, however, and despite his reluctance to become involved in this type of problem, the family doctor encounters them and, in fact, he has them upon his doorstep in great profusion. True enough, many of them are there masquerading under various congeries of symptoms.

To complicate this family physician-psychiatry problem a bit further, it is now generally agreed that the family doctor is really the first line of defense against mental disease. Because patients and their families consult him first, he is seen to be not only in a position to detect emotional disorders in their incipiency, but also to prevent or eliminate those conditions which are harmful to mental health, especially as they show themselves in childhood. Emotional disorders may be superimposed upon physical illness; they may complicate it; or they may arise independently. However, they manifest themselves, the patients and their families feel justified in presenting them to their family doctor, even as they feel justified in taking to him their various anxieties and their conflicts. The niceties of differential diagnosis elude these patients. They have no knowledge either of the fine distinction between organic and functional ills or the preferences of the doctor. They know only that they are ill and they look to him for assistance. Inasmuch as the incidence of these problems shows no evidence of dropping, we are justified in regularly reviewing our knowledge of them and that is our intention here.

We are not primarily concerned with the major psychoses *per se* in this presentation. They are medical emergencies and they require specialized treatment, usually under protective cover. We are, of course, concerned with them from a humanitarian standpoint, for we know the distress

Presented at the Annual Session of the Michigan State Medical Society, Grand Rapids, September 29, 1955.

they bring to individuals and to families; also, the medical and economic problems they pose interest us as citizens. The statistics concerning these illnesses are overwhelming. Were those of any other illness even to nearly approximate them, a national emergency would be declared, but in the case of mental disease they are met with a respectful apathy. This is not the place to elaborate upon mental hospital statistics, but rather let us consider just two aspects of the problem in order to keep it in proper focus. The first: half of the nation's hospital beds are occupied by patients with mental disorder. The second: a quotation from recent U. S. Public Health testimony before a Congressional committee:*

"The cost of taking care of the mentally ill with public funds, including maintenance of such patients in public hospitals, VA pensions, and other State and local mental health activities, in 1952 amounted to $1,041 million, or about $2,900,000 per day. This is about $2,000 per minute day and night."

It would appear, then, from these facts alone that time spent in the prevention and early detection of mental disorder is exceedingly important and, in fact, this function could well be one of the most important we perform from both a humanitarian and an economic standpoint.

The frank and florid psychoses are easily recognized and only rarely is the family doctor required to cope with them. It is the insidiously developing processes which cause the trouble. Often these are malignant and there is danger that they might be missed entirely, masked as they frequently are by vague and ill-defined hypochondriacal symptoms. These problems are a major challenge. Discovered soon enough and handled properly, the break may be prevented and the patients saved for useful lives.

Schizophrenia is a case in point, responsible as it is for the blighting of over 100,000 young lives each year. In its early stages, it usually lacks the features suggestive of the later, full-blown psychosis. The irrational, illogical, unpredictable behavior, the dream-like quality usually associated with schizophrenia, is often inconspicuous in its early phases. The young patient may simply appear to be unduly worried over physical symptoms for which no organic cause can be found. A certain degree of reticence, shyness or mild eccentricity may be noted, or perhapse a certain withdrawal from social contacts, but there is little to indicate that beneath the surface negative, destructive feelings are in operation, often directed toward people with whom the patient seems to be most congenial. The conflict that ensues, accompanied by its terrible anxiety, sometimes erupts into aggressive and violent behavior; but much more frequently it is masked by physical symptoms: chronic pains in the abdomen or in the back of the head, or symptoms of some vague gastrointestinal conditions. Many patients who eventually reach the psychiatrist have had more than one operation for physical symptoms connected with a threatened outbreak of schizophrenia. The important thing is to keep this illness in mind, for the longer it goes on untreated the less satisfactory the results of treatment. Early diagnosis and prompt referral of the patient to competent psychiatric care is the watchword in the battle against schizophrenia, for its inroads lead to the eventual filling of federal, state and private mental hospitals with their hard core of chronic patients.

The patients with paranoid psychotic reactions also are in need of early detection by the family physician. Although only a small number of them exhibit real danger to society, the potential danger should never be forgotten. These illnesses, too, may be ushered in by hypochondriacal symptoms involving any bodily system but the complaints usually have a bizarre quality. The patient will accept no explanation for them other than those he has concocted himself and he accepts no reassurance about them at all. In need of some relationship, yet being removed from friends and neighbors through suspiciousness, these patients tend naturally to gravitate to doctors' offices where some contact and solace may be found. Even this relationship markedly increases the patient's tension, however, and it cannot be sustained too long.

Often in the late stages of a paranoid psychosis, the delusions become encapsulated from the rest of the personality and have little emotional drive behind them, but this is not so earlier. Then the delusions have a marked anxiety charge and the situation is potentially explosive. All doctors, particularly those in community practice, should be alert to the various signs of danger. The first of these is intense feelings associated with the false beliefs. The greater the hatred that accompanies them, the greater the danger that the patient will

*Dr. R. H. Felix, U. S. Public Health Service. Hearings before Committee on Interstate and Foreign Commerce. House of Representatives, Oct. 7-8-9, 1953. Page 1087.

act against his supposed persecutors. The greater his conviction that he must protect himself, or protect a member of his family, the greater the potential hazard. Dangerous, too, are those patients who have assigned to themselves some special mission in life, especially if they give any indication that in achieving their ends, any means is justified.

Many paranoid patients derive satisfaction from their delusional systems or from real life situations that somehow shelter them from stress. An upset in this tension-satisfaction balance, however, is fraught with danger. A bad portent is the narrowing of the focus of hostility from many people to a few, or, especially, to one. A serious misinterpretation of an ordinary but distressing event is also omnious. Being fired or demoted in his job may be seen by the patient as part of a plot to destroy him, and when a patient claims that some particular person is out to get him or that the doctor is giving him poison instead of medicine, the situation is hazardous. There may be a fusion of hypochondriacal complaints and delusions of persecution, with the patient blaming his supposed physical decline on some doctor who used to treat him. Warning signs of changes in the direction of danger are those of increasing tension, agitation, restlessness, and anxiety. The individual becomes more demanding and more resentful when his demands are not met. At this point, there is danger of a panic-like state at the thought of some imminent attack against himself. Delay in the hospitalization of these individuals is to court disaster. For the sake of the patient and society alike, it is imperative that they be placed under the protection of a hospital.

Those physicians who are in community practice are undoubtedly more alert to the dangers just mentioned than they are to those associated with a depressive state, unless the latter is unmistakably psychotic in nature. The implications of the milder depressions masked by physical complaints are often missed. The treatment of depression has been revolutionized in the last fifteen years and with modern therapeutic methods attacks of depression can usually be terminated within a brief period of time. This is true of most depressive reactions. Hence the protection of depressed patients against suicide and their prompt hospitalization and treatment are also matters of urgent importance.

There is no need here to indicate that the most prominent symptoms of depression are chronic states of dejection or despondency accompanied by self-depreciation. A depression may range in severity from a disturbance of a psychotic nature (manic-depressive or involutional) to a mild reactive depression. The underlying psychopathology is similar in all these types, but disturbance in personality function varies. Many patients whose symptoms are vague, persistent, manifold and ill-defined are suffering from mild psychoneurotic depressions masked under multiple somatic complaints. Included among these complaints are fatigue, insomnia, loss of interest in work, family and friends, and, not infrequently, vague widespread aches and pains. Early morning awakening and mild loss of weight are almost typical of the pattern and questioning will reveal that the patients feel worse in the morning and have difficulty in getting started on their daily activities. At the end of the day, if there have been no unusual difficulties, they feel somewhat better but one should not take solace in this, for the cycle is repeated the next day.

Patients who are moderately depressed may be real suicidal risks, in greater danger, in fact, than those in the depths of despair, for the latter have difficulty in assembling their faculties sufficiently to carry out a planned action. Obviously, every patient who is just slightly depressed does not seek to destroy himself; but the important thing is to be able to decide which ones are likely to do so. It is the hopeless patient, the one who sees no reason for living and who believes that his family and the world will be better off without him, who is the serious risk, as is the patient whose agitation is increasing and who is given to impulsive action.

No matter how we may feel about it, and admittedly even its name is frightening, convulsive therapy is remarkably beneficial in depression of any variety. Techniques of electrotherapy have been improved over the years so that risks of serious complications and of undue distress to the patient are extremely small. Convulsive therapy is the treatment of choice in endogenous depressions and in many reactive cases. In some instances, it is required before psychotherapy can be effectively carried out. In the mild reactive depressions, convulsive therapy is hardly necessary and supportive therapy may be all that the patient needs. The family physician has been giving this type of treatment for ages past. He does need

to be sure, however, that he is dealing with a relatively well integrated individual, for, if he is not, a mild reaction might well advance to a severe process, with the suicidal danger greatly enhanced.

Actually, the severely depressed patient whose illness comes on in a rush is in a more fortunate position today than the mild depressive. Ordinarily, his critical condition brings him promptly to the hospital where he receives treatment that greatly shortens his period of disability. The mild depression is quite likely to pass unrecognized and the patient drags on alone and unaided. Even if the diagnosis is made, radical treatment is put off and evaded by both doctor and patient, and there is the possibility that the condition might become long lasting or intractable. Depression, like schizophrenia, needs medical treatment and supervision from the early stages. If it is insidious in onset, it may pass to chronicity before it is even suspected. If there is any question about its depth, it is best to transfer the responsibility for the patient to the psychiatrist, for it then becomes incumbent upon him to correctly diagnose and gauge the depth of the reaction. This decision may be crucial for the life of the patient and the welfare of his family.

Though the major psychiatric conditions do not fall into the therapeutic province of the family physician, I have indicated briefly those which might prove dangerous. There are a number of other emotional problems which the doctor can do much to relieve, however, and most of these are related to anxiety. It is frequently reported that more than half of the psychiatric conditions encountered in general practice are those of early or chronic anxiety states. These fall into different areas, including physical deficits or organic lesions of one kind or another. Another large area is occupied by the anxiety neuroses, including tension states and general anxiety-proneness. Another, and this is of great importance, comprises anxiety states with severe somatic reverberations. Only part of this last group is made up of psychosomatic illnesses proper, which involve actual organic lesions or systemic deviations presumed to be initiated or nurtured by conflicts within the personality.

Anxiety neuroses are marked by chronic, diffuse anxiety which may wax and wane but which rarely disappears. The reaction is not limited to discrete objects or suitations, as in the case of a fear reaction, nor is it unconscious, as in some other types of psychoneurosis. Since the patient worries about every possible contingency and is continuously insecure, his condition may be extremely disabling. The anxiety disturbs the sleep pattern and the patient relives in dreams the unmastered danger threats of childhood. An acute attack of anxiety may begin suddenly, even in the absence of a precipitant. The patient has palpitations, his breathing is labored, he perspires and has a feeling of impending nausea and perhaps of diarrhea; these are the physical concomitants of anxiety. Often he fears that some physical calamity is occurring or he suspects that he may faint or lose control of himself. In the severe attack, the patient is in panic, endangered from all sides, overwhelmed and completely helpless. When he recovers from the acute experience, he remains chronically fearful lest it recur. This, in turn, increases his anxiety and makes him more vulnerable; a vicious cycle!

The chronic anxiety reaction tends to disturb body functions and the patient interprets such symptoms as diarrhea, indigestion, headaches and palpitations as evidence of incipent organic disease. He is likely to be extremely apprehensive about his heart, to worry about infectious diseases and to be frightened by minor cuts and bruises. The fear of disease and the subjective physiological effects of anxiety bring him to the doctor at frequent intervals. It is axiomatic in psychiatry, as it is in all good medical practice, that these patients must be examined thoroughly. They tend to view their distress as a portent of disaster, and reassurance on the basis of perfunctory physical examination will only increase their anxiety and their symptoms.

Since the patient with chronic anxiety will exaggerate the slightest hint of organic disease, we are all constrained to avoid giving him any reason to misunderstand the facts. If organic disease is ruled out, the cause of the symptoms must be sought, for the diagnosis of neurosis of any kind can never be made by exclusion. Encouraging the patient to talk and to ventilate his problems may give initial relief in the case of mild or early anxiety. It is important to explain to the anxious individual the effects of fear, anger, tense anticipation and other emotions upon the bodily systems. The personality and attitudes of the individual concerned are evaluated and the situations causing frustrations and tension sought without undue

or injudicious probing. Demonstration of a temporal correlation between the appearance of the anxiety and certain events in his life may give the patient some insight and relief. He must see the necessity of adjusting to his limitations rather than struggle against insurmountable obstacles. Symptomatic relief is of course good medical practice, but it should be kept in mind that such relief is usually transient.

By helping the patient to understand what is wrong with him, the family physician can do much to relieve anxiety states. His best work, of course, can be done in cases of anxiety reactive to an environmental factor at least partially recognized by the patient. Cases of obvious deep-seated origin, those produced by unconscious conflict, will probably need the help of a specialist. Nevertheless, even here the family doctor who has a basic knowledge of psychodynamics and knows his patient well may be able to determine the source of the conflict. It is one of the virtues of treatment by the family physician that he knows the overall situation, while the specialist knows only part of it. In handling anxiety states, the crucial point to remember is that, while the specific situations that produce anxiety may be unchangeable, attitudes to them are not, and an important part of treatment is in helping the individual to change illogical attitudes and lessen his tension.

For many years, psychiatrists have sought some therapeutic agent which would control the physiological symptoms which accompany anxiety, but it is only recently that any really effectual agents have appeared. The drugs chlorpromazine and Rauwolfia Serpentina in its various forms seeemingly have the property of allaying anxiety and controlling agitation. Unfortunately, ideation is not changed and the drugs are not curative, but they are potent agents and they are of great importance in the influencing of mood and behavior. In addition, they are of particular value in controlling overactivity and even mania.

Like all drugs, these agents have their untoward reactions, but a knowledge of their workings allows one to use them in fairly large doses with relative safety. Also, like all therapeutic agents, only time and careful scientific observation will determine their actual worth. In the meantime, however, they are of value in the hands of the family doctor and psychiatrist alike and already they have proven of value in the conditions outlined above.

The emotional upsets of both the male and female in middle years belong quite properly to the family physician, unless a psychosis appears. The doctor who knows the patient best and whom the patient trusts the most is best qualified to treat him at this time, no matter what his specialty. He should be on the watch for the mild anxieties and minor depressive reactions that so often occur during the climacterium and endeavor to check them before they evolve into disabling conditions. It is important to remember that endocrine changes, per se, play a small part, if any, in most of the psychiatric disorders which develop in the climacterium; or perhaps better stated, endocrine therapy is of little use in the treatment of psychiatric disorders which beset the female at this time of life. A large body of evidence suggests, for instance, that women who develop involutional psychoses have been subject to psychologic tensions for years and have cultivated a way of life that provides no lasting emotional satisfaction. Similarily, the depressions of varying degrees which ocur in middle life in the male seem to be engrafted upon the personality structure of the individual and on faulty goals and values identified with the ego. Here again endocrine therapy is of no value insofar as the emotional symptoms are concerned.

The depressive emotional upsets of men in middle life have sometimes been dignified with the name of "male menopause." This is a complete misnomer. These difficulties occur in the fifth decade in dynamic, obsessive, hard driving individuals. The illness can drag on for several years, exhibiting symptoms of depression, lessening of interest, vague physical signs, loss of zest, and general dissatisfaction. The encouraging thing about these patients is that they tend to recover under supportive therapy. They need advice, guidance and symptomatic treatment plus a chance to talk over their problems. Many of them have a semblance of insight and they desire assistance if it does not have to be purchased at too great a price to their self-respect. This treatment is also best given by the family physician whom they know and respect.

More attention by all of us, family doctor and psychiatrist alike, to the needs of our aging population would yield enormous gains. Organic de-

mentia of an irreparable nature is much less frequent in older patients than is generally supposed. Many of the psychiatric pictures in senescence are related to conflicts and experiences of earlier life and to life-long unhealthy patterns of reaction. They are also due to altered status in the family and the community and to the inevitable signs of physical decline. With the aged patient, as with all others, the goal of therapy is to help the individual toward self-acceptance. The fact that he has an understanding physician who will see him, respect him and listen to him is of the greatest therapeutic value. The greatest need of the older person is to feel himself a participant in life. Because he fears the loss of his independence and his identity he may become emotionally unstable and may give up trying to adjust long before he is seriously incapacitated. We have all seen elderly patients do this; they act as if they have struggled enough and they quit and withdraw and then become ill.

Many problems of aging are imposed either by the individual himself or by society. Such problems require individual attention in order to prevent personality disorganization. With the increased longevity of the population, chronic diseases and geriatric disorders are consuming a large portion of the time of the practicing physician. There are now eleven and a half million people aged sixty-five and over in these United States, a sizable segment of the population. The emotional problems of this group are an offshoot of social and economic phenomena. The family physician will find it intensely rewarding to direct some of his attention to the emotional pressures peculiar to old people in our culture, and to the possibilities of modification of their way of life, their attitudes toward themselves, and the emotional climate that surrounds them. No other psychiatric situation responds better to suggestion, interest, kindness and symptomatic treatment. Obviously, then, this task is best done by the family doctor.

Old age is a time of major stress imposed on the waning physical and mental capacities of the individual. The props of individual security vanish. No longer are the satisfactions of work and independence forthcoming. One is old by fiat of an industrial culture, and sixty-five is the age of forced retirement. Loved ones die and the world takes on a new and disordered appearance. It is not easy to give up roles and activities associated for so long with self-worth and adult productivity.

The subjective emotional experiences of the aging individual may be a welter of frustration, insecurity, anxiety and disappointment. Many times this experience sets the stage for morbid behavior. Feeling himself a burden to others, sensing hostility in others, the elderly person in turn reacts with resentment and hostility. This, and the guilt it evokes in him, may well lead to a depressive reaction. Increased isolation may foster hypochondriacal preoccupations and paranoid reactions. Not infrequently, physical illness precipitates or contributes to a psychiatric disorder in old age. Physical illness, of which the patient is unaware, is sometimes the basis of a depression. Inanition, impairement of health, all lower the threshold of tolerance to anxiety. Defects of vision or hearing may augment suspicion and lead to paranoid tendencies.

Like affective disorders in other age groups, depressions in senescence respond favorably to treatment. The fact that physical treatments, preferably electroshock, are effective in so many cases of depression and in some of the paranoid reactions of old age, confirms the functional nature of many of the psychoses of senescence. It lends support to the impression frequently reported in the recent psychiatric literature that there is even a large psychological component in the etiology of senile deterioration. Certainly, senescence is a cultural artifact, as well as a biological reality. By helping these patients to accept themselves and the modifications imposed by their changing circumstances, the doctor in community practice can help reduce the admission rate to mental hospitals of many old people who are deserving of a better fate.

It seems, then, from this review that the psychiatrist and the family physician have much in common and that, as medicine moves into its comprehensive approach to patients on a wider scale, we shall move into even closer relationships. We shall like it. I don't know how you will feel, but in closing let me give you some advice from one of your own confreres. In speaking of neurotic patients, Dr. Ronald Gibson says:*

(Continued on Page 754)

*Introducing the Family Doctor. Ronald Gibson, Provost, SE England Faculty, College of General Practitioners, Lancet, p. 409 (Aug. 27), 1955.

Social and Economic Aspects of Medicine

By Ernest B. Howard, M.D.
Chicago, Illinois

IN the Western world the increased life expectancy achieved in this century is phenomenal. In 1900 the median age at death was thirty; in 1950, 66. Life expectancy at birth has increased from forty-seven years in 1900 to sixty-nine in 1950. In 1900, the percentage of voters fifty years or older was twenty-four, and in 1950, about thirty-five. The total population of the United States has doubled since 1900, but the population sixty-five and over has quadrupled, and the relative increase of our older voters continues.

The social and economic impact of these changes is apparent in many different directions. Private annuity and pension plans have mushroomed. Government cradle-to-grave schemes and Townsend plans, with their emphasis on security in old age, have attracted the support of politicians and promoters, sociologists and economists. Special tax privileges have been accorded employers who set up approved pension plans for their employees, and self-employed groups are demanding the same right to save for old age. As the number of aged beneficiaries rises, pressure to increase Social Security payments also rises.

A new social force has developed in society that blurs the liberal-conservative cleavage. Free competitive society is confronted by older citizens whose competitive ability is markedly reduced but whose wants remain. Doctrinaire socialists grope for collectivist answers to an unfamiliar problem.

As our aged become better informed and organized, their efforts will be directed toward promoting the stability of the dollar, since inflationary depreciation of purchasing power will vitiate the gains they may have achieved through Social Security, private pension systems and savings. Conflict, therefore, between the aged pensioners and the monetary inflationists is inevitable. The shape of the future will depend to a large extent on the relative ability of the free enterprisers on the one hand and the leftists on the other in resolving this complex problem.

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The advantage clearly rests with the former since their legislative and political policies are designed to promote free markets, reduced government spending and public debt and balanced budgets—in short, conservative government fiscal policies and the promotion of economic growth in a framework of stability. The socialists, on the other hand, endorse policies which, all over the world, have led to inflation, depreciation of currency, piling up of public debt, and destruction of the value of pensions and savings.

What has socialism to offer to the aged and to others? As a dynamic force it is by no means spent: A definite shift to the right of its center of gravity, is, however, apparent. Formerly emphasizing ownership of production by the state, socialist planners long since have substituted government regulation for ownership. Furthermore, the anti-capitalist sentiment of earlier days is rarely heard now.

The pendulum has clearly swung in England although the return to a free competitive economy will be slow and difficult. In the United States the leftist trend has been distinctly slowed by the advent of the Republican administration in 1952.

It is obviously true that union leaders provide the core of doctrinaire socialist sentiment in our country today. The legislative platforms of both the AFL and the CIO stress increased government spending, bigger government, more "social" responsibility and less dependence on individual enterprise. What can we expect from labor? Labor's pension policy has been fairly uniform due to its top priority in industry-wide collective bargaining. Health benefits, by contrast, have been negotiated in a relatively disorganized manner, with different unions promoting a variety of benefits and various mechanisms through which to provide them. Many AFL unions have established labor administered health centers, while the CIO has tended to stress industry-wide benefits provided through insurance and Blue Cross-Blue Shield. The medical care plan which combines group practice and prepayment—so called panel prac-

tice—has received widespread favorable recognition from labor, but a national trend is not visible at this time. The AFL-CIO merger obviously will have a profound impact on medicine, although it is by no means clear what the end result will be. It is predicted that the merged labor movement will now push the attainment of health benefits into a top priority bargaining position. This development will be accompanied by a uniform national approach. The diversity of current health systems, reflecting the relative disorganization of labor's attack in the past, will be replaced by uniformity. Labor will seek employer-financed benefits of a comprehensive, service type. Comprehensiveness will include treatment for chronic illness as well as preventive medicine and early diagnosis. Labor will strongly oppose the development of major medical insurance. A former UAW health consultant said in October, 1955, that "the major medical benefit concept is contrary in principle to the basic tenets of union thinking." . . .

It is possible that if management assumes the burden of financing comprehensive, service-type, benefit programs for labor on a nation-wide basis, the pressure from labor for government intervention will subside. Should these circumstances develop, it is an interesting question whether management may attempt to transfer a portion of the cost to the public through increased government taxation for health benefits.

The need for close relations between management and medicine is therefore imperative. The danger exists that the future shape of medicine may be altered irrevocably at the bargaining table without medical representation and advice.

The health insurance industry, too, is even more immediately concerned, since millions of subscribers are involved in these labor negotiations. The antagonism of labor to the widely accepted insurance principles of deductibility and co-insurance is a matter of grave import.

The increased political power of labor following the AFL-CIO merger is widely recognized. Actually, the economic impact may be even greater. Politically, union labor leaders with rare exceptions have for many years promoted the candidacies of liberal thinkers and opposed conservatives. In most recent campaigns the political action of AFL and CIO unions has been almost indistinguishable. In the economic sphere, on the contrary, the AFL and CIO and even individual unions within those two organizations have engaged in vigorous competition. The merger of these two competing forces provides for the first time a modified labor movement whose economic and monolithic power is enormously enhanced. The promotion of uniform national levels of wages and benefits by this new integrated force will have extensive economic repercussions.

In the midst of these broad movements, medicine has been able to produce a product of remarkable quality at a price well within normal expectation. Our basically competitive medical economy has produced long life expectancy, low infant and maternal mortality, innumerable new drugs and therapeutic agents, and vastly improved diagnostic methods—and at a relatively low cost. For over twenty years Americans have spent only about 4 per cent of their total expenditures for health care. During the same period the percentage of their health expenditures paid to physicians has declined from approximately 1.80 per cent in 1937 to 1.63 per cent in 1953. Furthermore, although the Consumer Price Index has risen from 100 to 1940 to 192 in 1954, the Index for medical care and drugs has risen from 100 to 174. More interesting is the fact that the price index of the physican's service rose only to 160. Hospital rates, by contrast, moved from 100 in 1940 to the astronomical figure of 322 in 1954. In the total health picture only hospital rates have shown this disproportionate price rise. These figures derived from the Department of Commerce, indicate that with the exception of hospital care, medicine and the industries allied with it, such as the pharmaceutical industry, have been phenomenally successful in providing an improved product at a relatively cheap price. It is, in fact, the attractiveness of the medical product and its high salability that has intrigued politicians and stimulated their appetite for control. . . .

Private enterprise in medicine has been successfully challenged in most nations outside the United States, probably because it lacked the energy, imagination and resiliency to adjust to new situations. Here, its record is truly phenomenal and its alertness unparalleled. But it must mobilize its total resources and use them effectively if it is to avert complete domination by the social and economic forces that now press upon it. The socialist encroachment continues. Proposals to extend Social Security to the disabled; extensive construction programs for research,

medical schools, nursing homes, diagnostic centers; government guarantees for mortgage loans to health facilities; federal reinsurance schemes; expanding veterans and servicemen's dependents programs—these and many more signify continuing government assumption of responsibility in health. The aging population, growing labor dominance, political appraisals of voter interest, inflation, the rise of the hospital and certain prepayment developments have, in many instances, abetted that trend.

To maintain our private, competitive medical system we must maintain the public confidence, extend insurance, Blue Shield and Blue Cross into areas and age groups not now covered; experiment with new types of coverage, particularly major medical and hospital insurance, with deductibles and coinsurance; reduce the overhead of prepayment systems to a minimum; publicize the effectiveness and high quality of free choice, fee-for-service medical care; indoctrinate management and industry in the economics of medical care and be prepared to give expert advice in collective bargaining negotiations; support and promote free enterprise in areas outside of medicine, especially as individuals and members of civic organizations; support proposals for electoral reform; and participate in political and legislative action in accordance with federal and state laws.

The aged can become ardent supporters of a capitalist economy if steps are taken now to deserve that support. Private insurance must meet the need by selling coverage during the working years that protects the worker in retirement; Blue Shield plans have a special role to play in serving the low-income aged group; the private nursing home industry needs to expand; retirement ages must be increased; special skills and work capabilities must be discovered and created; medical research must probe the problems of aging even more vigorously; economic stability must be engendered by sound fiscal policy and enlightened competitive enterprise.

The challenge to medicine and to the producers of other services and goods is closely related. Similar social and economic factors are influencing all segments of our economy. Close liaison, therefore, between medicine and industry is essential.

Finally, in promoting and selling individualism we must beware that we do not lose the words with which to express ourselves. Perhaps the most successful appropriation of a word by the socialists was their subversion of the word "liberal." Historically, "liberalism" was the humanistic philosophy of Edmund Burke and others who stood for freedom. The word itself is derived from "liber" meaning free. The great liberal tradition of the 19th century was close to what we consider conservative theory today. In a propaganda sense when the radicals of the left won control of the word "liberal" they achieved a signal public relations victory. More astounding than that successful attempt, however, is the obvious move today by the collectivists to capture the word "conservative." Dean Acheson in his recent book, "A Democrat Looks At His Party," says: "What must be stressed is the underlying conservatism of the New Deal. By and large the New Deal was a clinic in the use of innovation to conserve and strengthen fundamental institutions." A recent book, "The New Conservatism," attempts to equate the word "conservatism" with modern liberalism. A resurgence of historical liberal thought and its dynamic, forceful presentation are badly needed today. Medicine must assume a prominent role in promoting that propaganda counterattack if we are to survive as a free profession.

ECZEMATOID DERMATITIS WITH SEVERE ALOPECIA

(Continued from Page 683)

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Social Trends

By Hon. August E. Johansen
Battle Creek, Michigan

I HAVE been asked to discuss the threat of broader socialization schemes in the field of health welfare—in other words, the threats involved in the burgeoning activities of the Federal government in this field.

This amounts to a request for a diagnosis. That is very fine, except I am sure as medical men that you will agree that a diagnosis without some sort of corrective or remedial prescription is pointless, or at least a decidedly incomplete procedure. So I shall attempt also to offer something in the nature of a prescription.

What are the threats, and what are the antidotes? Permit me to try to answer these questions under three main headings:

Threat No. 1 is the over-all trend toward increasing reliance upon government, and particularly upon federally centralized government, for the solution of all human needs and problems. This trend is by no means limited to the field of health welfare.

Existence of this trend is too obvious and manifest to require detailed elaboration. This is oversimplification, of course, but sometime try this simple test: Go to your telephone company or your public library, and secure telephone or city directories for the years 1916, 1936, and 1956. Check and compare the entries for the several years under the caption, "United States, Government of."

Actually, what we are talking about is no longer a trend but a terrific on-rush, growing more and more uncontrolled and uncontrollable. A river is one thing. A rampaging flood is quite another. We are at the flood stage.

What is the antidote to this threat?

First of all it lies in re-education of ourselves, and education of the younger generation of citizens, as to the basic premise of our American Constitutional system. I make no apology for mentioning the Constitution. To support it, and defend it from all enemies, foreign and domestic, is the Congressman's version of the Hippocratic oath.

That basic premise is that government, if it is to be kept as a servant and not permitted to become a master, must be a government of limited, divided and diffused powers.

A second antidote is to present to the American people, through every possible medium, the other side of the familiar argument that the complexities of modern life and society make it inevitable that government shall more and more be centralized in Washington and all affairs directed from the Federal level. The other side of that argument, of course, is that the very vastness and complexity of our society make it impossible to run the whole show from a single central point. If we persist in trying to do it, more than the health of our Presidents will break under the burden. Either the vast machinery of government or freedom itself will be the final victim.

The third antidote is ceaselessly to remind the people that there are other agencies of problem-solving and needs-meeting than the Federal government or government at any level. Voluntary collective effort outside of government still exists, still functions—believe it or not—in business and industry, in the great professions, in education, in labor organizations, in philanthropy, in science, and even in agriculture.

Threat No. 2 is the staggering volume and weight of billions of dollars of Federal monies—taxpayers' monies expropriated by government—and the actual and potential influence and power of those billions. Money, including Washington money, talks. It can talk in many voices: in voices of temptation, in voices of distraction, in voices of control and coercion. Government money can even be hush money, silencing criticism.

This is particularly true in the field of health welfare. This is something which directly confronts and affects you. It is something which you have constantly to buck. Don't ever underestimate the potentialities of this power of money, a power for evil as well as good.

Medical health budgets of the Federal government, its departments, agencies and commissions for the Fiscal year 1955 totalled 2,131 billion dollars. They totalled some 137 million dollars more for Fiscal 1956. I do not have the exact total for

Address presented at the Michigan State Medical Society Annual County Secretaries-Public Relations Seminar, Sheraton-Cadillac Hotel, Detroit, January 27, 1956.
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the Fiscal 1957 budget, but the proposed increase over 1956 is substantially greater than the 1956 increase over 1955.

Please bear in mind that Federal competition with the non-governmental activities in the field of medicine and health has one important difference from Federal competition with ordinary business enterprise—objectionable as that is. The business enterprise is geared in substantial measure, in terms of available capital, of economic resources, and of competitive know-how, to meet this type of government intrusion. The capacities of non-governmental medical and health professions and agencies in this respect are, by their very nature, considerably more limited. No wonder your profession and field of endeavor are viewed as fair and easy game for the do-gooders, the planned-society advocates, the socialists, and worse.

And what is the antidote to this government big money threat?

First of all, it is to disregard the old admonition against looking a gift horse in the mouth. Take a good long look in the mouth of every Federal give-away or subsidy program in your field. Take a good look and note and report the sharpness of the teeth of actual and potential governmental power and abuse you see there.

Beware of the government when it comes bearing gifts. Remember, for one thing, that state and local governments have long been warning that usurption of their tax base and resources by the Federal government is strangling these units of government. Remember that every new proposal for Federal grants-in-aid gives the noose another tightening twist. Remember also as taxpayers that the Federal government gives you nothing which it does not first extract from you and return with substantial handling charges deducted.

I am frankly disturbed—please forgive the candor of a friend—over comments I have heard, even here today, with respect to some of these proposals; to wit, "We don't particularly want some of these things; we haven't asked for them, but if the Federal government wants to provide them, perhaps it is all right."

That is altogether too nonchalant and superficial an attitude, may I say with all respect. All other considerations aside, bear in mind that there is implicit in every such program an effort by someone or some political party to match or top someone else's bid for public approval and votes. And also inevitably present is the invitation or the political necessity, so-called, for someone else this year or next to try again to outbid the rival politician or party. Bureaucracy thus becomes jet-propelled; each new explosive blast of fund-voting sends it and its schemes soaring higher into the political and fiscal stratosphere.

Above all, and this is asking you to be a bit wiser and more self-restrained than some of your fellow citizens, the antidote lies in your refusing to yield to shortsighted selfishness. I plead with you, if there is some small (or large) segment of these programs which appeal to your interest or seem to assure you benefit, subject it to the same severe scrutiny you feel all the rest requires. Somewhere there must be some self-restraint, some self-discipline, some vision, or the outlook is blacker than I am willing to concede.

One further antidote: there is urgently needed a clear and sharp awareness that there are many advocates of the welfare state who have learned all too well that what they cannot accomplish or gain by outright, direct assault and attack, can be wooed and won by the subtler arts of seduction, of gradualism, of sly and piecemeal accomplishment.

Threat No. 3 is the confusion, sometimes honest and sometimes deliberate, of the public understanding of the all-important difference between ends and means.

It is the error, or the intentional wrong, of believing or professing that if a specific end is right and proper and desirable, a specific means for accomplishing that end is automatically right and proper and desirable.

It is, for example, necessary and right and even morally obligatory that medical care be provided, even more adequately than at present, for dependents of servicemen. The end is valid. But that does not imply that the right means, or the only feasible means of achieving that end, is through an enlarged military medical corps, through more government-financed and operated Armed Services hospital facilities, or at the price of permanent continuation of the doctors' draft. Adoption of Blue Cross and Blue Shield plans for servicemen's dependents, entirely or partially at government expense, is at least one possible alternative and in my judgment an infinitely preferable one in the public interest, even more than in the interests of your profession.

The end of adequate medical service for the nation's veterans is a valid one. But it does not

automatically follow that the means must or should necessarily be exclusively through government hospitals, clinics and contract care. The hometown care program, in my judgment, must not be eliminated, because it provides one of the professional and governmentally sound means to the desirable end.

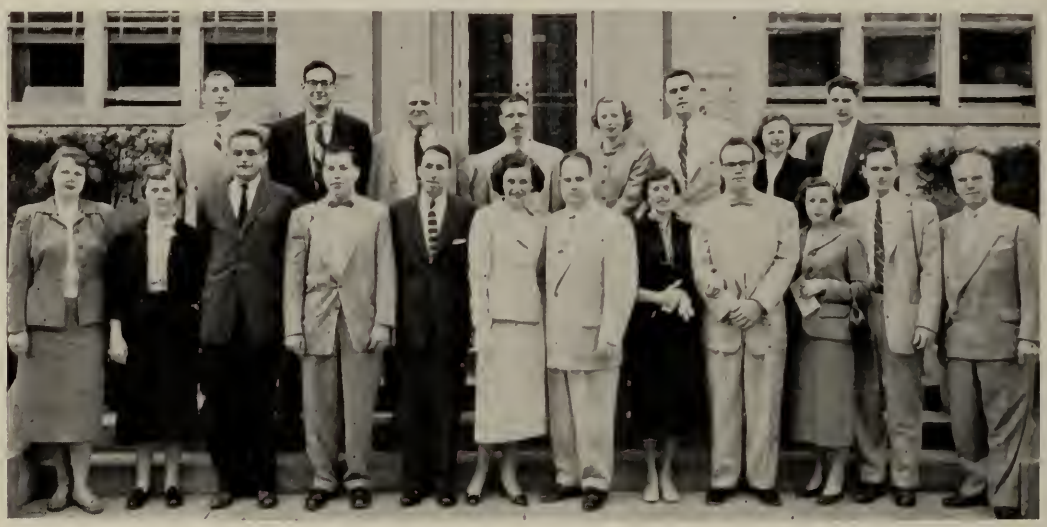
It is necessary that the American people have adequate protection against the economic hazards of health. That is a valid end. But it does not mean that the right means of attaining that end is compulsory, nationwide, government-imposed and operated health insurance. That is not the sound means to the desirable end.

The antidote to this threat of confused means and ends is to carry the message, within your own ranks, to the nation's legislators, and to the American people, that great and noble and imperative ends in medicine and in every field of humanitarian accomplishment can still be served by other and better means than burgeoning bureaucracy, higher and higher taxes, wilder and wilder spending, more and more governmental centralization, and more and more statism with all the ominous power and threat that involves.

My prescription for you, and for all my fellow Americans, is once again to proclaim liberty and by word and deed demonstrate that, as in the past, freedom is still the most prolific source of progress and problem-solving known to man.

My prescription for America is that we become ever more vigorous challengers and competitors of government and so drive back the flood-tide of governmental power to the limiting banks and retaining walls of common sense and the Constitution.

WAYNE UNIVERSITY SENIORS VISIT RESEARCH LABORATORY



Members of the senior class of the Wayne University College of Medicine and their wives visited Eli Lilly and Company April 1-4, 1956.

While guests of Lilly's, they inspected the research laboratories and toured pharmaceutical, biological, and antibiotic production facilities.

First Row (left to right): Barbara Defeaver; Joan Pennington, medical secretary in the college; Joseph Kopmeyer, secretary of the class; Thomas Przybylski; Gaylord Alexander, Mrs. Murray Deighton and Mr. Deighton; Mrs. Ralph Woodbury and Mr. Woodbury; Mrs. Robert Allaben and Mr. Allaben; and L. M. Fahl, Lilly representative in Detroit, who accompanied the group to Indianapolis.

Second Row: George Kerwin, Harold Portnoy, Dean Jacoby, David Stone, Mrs. Richard Hall and Mr. Hall, and Mrs. William Siebert and Mr. Siebert.

Humoral Physiology-Psychology and Shakespeare's Dramas

By Irving I. Edgar, M.D., F.A.C.P.
Detroit, Michigan

THE ELIZABETHANS had developed a comprehensive physiological-psychological system of man based on the teachings of the ancient Greek philosophers, and highly elaborated by the later Arabian thinkers—all to be further synthesized by the beliefs of the Church. This synthesis gave them an all-encompassing philosophy of life a complete *Weltanchauung* that satisfactorily explained all the universal phenomena. Man was God's masterpiece, his noblest creation, "the best furnished and most perfect of all other living creatures, having . . . in his soule the image of God, and in his bodie the modell of the whole world."[2] He was the microcosm, the abridgement of the universe which was the macrocosm—all guided by the hand of God. Their system of physiology-psychology accounted for all men's activities in the world much like the psychoanalytic psychology of today encompasses all of man's activities.

Specifically, it has already been shown how their world outlook influenced the Elizabethan view of the circulation of the blood and of the place of the organs of the body in this system.[1] But not only did they liken man to the earth in the gross and superficial sense—speaking of his veins as rivers, his bones as rocks, his heart as the sun, his brain as the governor, . . . but they went deeper in this fundamental conception. For in addition, the whole world was made up of the four elements, earth, water, fire and air; and this was also true of man. The humoral physiology, psychology and pathology that dominated the healing art for so many centuries was but an extension of the concept of these elements, inherent in their qualities of *heat, moistness, dryness, coldness;* further developed into the more complex psychology of the four humours, *complexions,* constitutions, and of the *passions* of the mind. It is within such a frame of reference that the Elizabethans fitted their thinking.

Man was composed of the four elements, earth, water, air, and fire, each of which was characterized by two of the four qualities, coldness, moistness, heat and dryness. Man also functioned by means of the four humours, blood, phlegm, choler and melancholy which were analogues of the four elements and partook of the same qualities. Health, both mental and physical, was determined by the proper proportions of these humours, and disease by their improper proportions. All medical diagnosis was aimed at determining the status of this humoral mixture in the body; and diet, purging and blood-letting were the chief therapeutic measures used to effect changes in this humoral mixture. Normal and abnormal psychology was based on the relative proportions of the four elements or humours; and the personality types, temperaments, constitutions or complexions, as Elizabethans called them, were directly derived from these humours and further elaborated with qualities of color. In consequence, Elizabethans thought and wrote quiet literally in terms of the elements and the humours with their qualities, and of the complexions with their characteristics and colors. They thought in terms of *earthiness, grossness, heaviness, airness, lightness, thickness, moistness, dryness, coldness* and *hotness.*

Interwoven and elaborated into this pattern of physiology-psychology were the vital spirits, "the chiefe and principal instrument of the minde,"[3] concocted in the heart and sent like vapours through the arteries to the various parts, particularly the brain as a sort of nervous system helping to maintain proper functioning. If we add to this the effects of the emotions, which the Elizabethans called the passions of the mind, upon man's actions we have then all the components to complete their system of thinking.

The scientific literature of the period is permeated with these concepts. Andreas Laurentius, a famous physician of the period, summarizes some of these ideas. He writes:

> . . . there are foure humours in our bodies, Blood, Phlegme, Choler and Melancholie; and that all these are to be found at all times, in every age, and at all seasons to be mixed and mingled together within the veins, though not alike much of everyone: for even

as it is not possible to finde the partie in whom the foure elements are equally mixed; and as there is not that temperature in the world in which the foure contrarie qualities are in the whole and every part equally compounded . . . but there must someone evermore which doth exceed the other: even so it is not possible to see any perfect living creation in which the foure humours are equally mixed, there is alwaies someone which doth over rule the rest and of it is the partie's complexion named: if blood doe abound, we call such a complexion, sanguine; if phlegme, phlegmatic; if choler, cholerike; and if melancholie, melancholike.[4]

He speaks of "phlegmatike persons" as "blockish" ". . . because the substance of their braine is too thicke and the spirits laboured therein too grosse";[5] of "sanguine persons," as having "the best complexion for health and long life . . . because . . . it hath the two main pillars of life . . . naturall heate and moysture in greatest measure";[5] of "cholerike persons" as "being hot and drie";[5] and of "the many sorts" of "the melancholike" . . . one . . . grosse and earthie, cold and drie . . . another . . . hot . . . another mixed with some small quantities of blood, and yet . . . is more drie than moyst . . ."[5] He concludes that "the qualities of the minde doe follow the temperament of the bodie."[3] He repeats platitudes of the times when he says that "gay and cheerfulness proceed from heate and moisture . . . heaviness and sadness from the two contrarie";[6] that, "Heate maketh men bolde, quicke of motion and headlong in their actions . . .;"[7] that "the instrument of these noble faculties is the braine . . . whose health and welfare consisteth of a good temperature";[8] the commonest form of melancholy being due to "a cold and drie distemperature of the braine."[9] He states the causes of some of the symptoms of melancholy in terms of that humour:

The melancholike humour . . . being blacke, causeth the animall spirits, which ought to be pure subtile, cleere and lightsome, it maketh them . . . grosse, darke . . . smoked. But the spirits being the chiefe and principall instrument of the minde, if they be blacke and overcooled also, doe drouble her most noble powers.[3]

.

because that the spirits and blacke vapours continually passe by the sinews, veins and arteries, from the braine . . .[10]

While Laurentius deals very little with the passions of the mind in their effects on human functioning, Thomas Wright has devoted a whole treatise to it and Robert Burton discussed it at length in his *Anatomy*. We quote a passage from each one as valid to our purpose.

Burton writes:

For as the Body works upon the mind, by his bad humours, troubling the spirits and sending gross fumes into the Brain; and so *per consequens* disturbing the Soul, and all the faculties of it . . . with fear, sorrow, etc. . . . so . . . the mind effectually works upon the Body, producing by his passions and perturbations, miraculous alterations; as Melancholy, despair, cruel diseases, and sometimes death itself.[11]

Thomas Wright says:

. . . there is no passion very vehement but that it altereth extreamly some of the four humours of the body; and all physitians commonly agree that among divers other extrinsicall causes of disease, one, and not the least is, the excess of some inordinate passion. The physitians therefore, knowing by what passions the maladie was caused, may well inferre what humour aboundeth, and consequently what ought to be purged.[12]

We have, then, a picture of man as a replica of the universe, made up of the four elements. The four humours, equivalent to the elements, arise from the chyle of the gastrointestinal tract and are elaborated by the spleen and liver and contained in the composite blood mass to maintain life in the whole body. Some of this blood is further refined in the heart to form the spirits which are contained in the arteries, and, with the brain which is the seat of the faculties, help rule man's activities. The passions of the mind influence the body humours and in this way produce changes in the body and in the mind.

Shakespeare and his contemporaries reflect all this in their works, and only in being aware of this milieu in which they moved can we truly understand them. In Sonnets 44 and 45 Shakespeare writes:

But that, so much of *earth* and *water* wrought
I must attend time's leisure with my moan;
Receiving nought by *elements* so *slow*
But *heavy* tears, badges of eithers woe.

The other two, *slight air* and *purging fire,*
Are both with thee wherever I abide;
The first my thought, the other my desire,
These present-absent with *swift* motion slide.
Fro when these *quicker elements* are gone
In tender embassy of love to thee,
My life, being made of *four,* with *two* alone
Sinks down to death, *oppressed* with *melancholy.*

In *Twelfth Night* (II, 3, 10):

Does not our life consist of four *elements?*

Again in the same play (I, 5, 294):

. . . O, you should not rest
Between the *elements* of *air* and *earth*

In *I Henry IV* (III, 1, 237) he says:

You are altogether governed by *humours*

In *Much Ado About Nothing* (II, 1, 357) we have the following line:

There's little of the melancholy element in her.

In *Richard II*, (III, 3, 55):

Methinks King Richard and myself should meet
With no less terror than the *elements*
Of fire and water, when their thundering shock
At meetings tears the cloudy cheeks of heaven.

In *King Henry V* (III, 7, 23):

He's of the *colour* of the *nutmeg.*
And of the *heat* of the ginger . . . He is pure *aire* and *fire*
And the *dull* elements of *earth* and *water* never appear in him.

In *Troilus and Cressida* (I, 3, 41):

Bounding between the two *moist elements*
Like Perseus' horse

In *Julius Caesar* (V, 5, 53):

His life was gentle, and the elements
So mix'd in him that Nature might stand up
And say to all the world 'This was a man!'

In *Antony and Cleopatra* (V, 2, 292):

I am *fire* and *air;* my other elements I give to baser life.

Likewise, Sir Philip Sydney in his *The Arcadia* writes:

O elements by whose (men say) contention,
Our bodies be in living power maintained,
Was this man's death, the fruit of your dissension?
.
Great be physicians' brags, but aide is beggarly,
When rooted *moisture* fails, or groweth *drie*

Christopher Marlowe writes *(I Tamburlane,* II, 7):

Nature, that fram'd us of four elements
Warring within our breasts for regiment

Further in the same scene:

The heat and moisture which did feed each other
.
Are dry and cold; and now doth ghostly Death
. . . gripe my bleeding heart

And again *(II Tamburlane,* IV, 1):

In sending to my issue such a soul
Created of the *massy dregs of earth*
The scum and *tarter* of the *elements*

Similarly, John Ford writes:

Like four straight pillars the *four elements*
Support the goodly structure of mortality;
Then shall the *four complexions* like four heads
Of a clear river, streaming in his body,
Nourish and comfort every vein and sinew[13]

And again:

This will not doe, I read it on thy forehead
The graine of thy *complexion* is quite altered
Once 'twas a comely *browne,* 'tis now of late
A perfect *green* and *yellow;* sure prognosticate
Of th' over flux o' th gall, and *melancholy,*
Symptoms of love and jealousie, poor soul[14]

Shakespeare carries through many more of these concepts that mirror his times. Thus in the matter of the complexions he writes down the following conversation between Moth and Armado *(Love's Labor's Lost,* I, 2, 82):

Moth: A woman, master.
Armado: Of what *complexion?*
Moth: Of all the four, or the three, or the two, or one of the four.
Armado: Tell me precisely of what *complexion.*
Moth: Of the sea-water green, sir.
Armado: Is that one of the four complexions?
Moth: As I have read, sir; and the best of them too.

The basic principle of the disequilibrium of the humours or complexions as a cause of mental illness in the Elizabethan sense is well stated in *Hamlet* (I, 5). Hamlet says to Horatio:

So, oft it chances in particular men,
.
By the o'er growth of some complexion,
Oft breaking down the pales and forts of reason
.
Shall in the general censure take corruption
From that particular fault.

In the *Merry Wives of Windsor* (IV, 2, 25), we have:

So curses all Eve's daughters, of what *complexion* soever.

From *Measure for Measure* (II, 4, 129) we get:

Nay call us ten times frail
For we are as soft as our *complexions* are

And from *Julius Caesar* (I, 3, 128):

The *complexion* of the *element*
In favour's like the work we have in hand
Most bloody, *fiery* and most terrible

In regard to the humours Shakespeare has many, many pasages too, some of which have already been quoted. In *I Henry IV* (III, 1, 237) he writes:

You are altogether governed by *humours*

In *Twelfth Night* (II, 4, 116), we have:

With a *green* and *yellow* melancholy she sat like patience
On a monument, smiling at grief

In *Taming of the Shrew* Shakespeare puts these words from Petruchio (IV, 1):

For it engenders *choler,* planteth *anger;*
And bettee 'twere that both of us did fast,
Since of ourselves, ourselves are *choleric.*

In *Hamlet* (III, 3), when Guildenstern tells the prince that the king is distempered with *choler,* Hamlet answers:

Your wisdom should show itself more richer to signify this to his doctor; for, for me to put him to his *purgation* would perhaps plunge him into far more *choler.*

In *Taming of the Shrew* (Ind., 2, 135), Shakespeare speaks of the humour melancholy as being "the nurse of frenzy."

The passions of the mind including grief, anger, hate, love, joy, get their full share of Elizabethan meaning in the dramas. Shakespeare *(Pericles,* IV, 4, 24) speaks of

The *passions of the mind*
That have their first conceptions by mis-dread,

In *As You Like It* (IV, 3, 72), he speaks of

great testimony in your *complexion* that it was a *passion of earnest*

In *I Henry VI* (V, 2, 18):

Of all base *passions,*
Fear is most accurst

He speaks of "the hot passion of distemper'd blood" *(Troilus and Cressida,* II, 2, 169); of the "two extremes of passions, joy and grief" *(King Lear,* V, 3, 198) and of "idle merriment, a passion hateful to my purposes" *(King John,* III, 3, 47.) He has one of his characters ask the question *(Much Ado About Nothing,* II, 1, 83): "What effects of *passion shows she?"* and another character is described as "Free from gross passion, or of mirth or anger *"(Henry V,* II, 2, 132).

In the matter of the *spirits,* there is also much to exemplify Shakespeare's literal usage of the term as part of the physiological system of the period. In his *Old Wives' Tale* (I, 2, 72), he writes:

And our weak *spirits* ne'er been higher rear'd
With stronger *blood.*

In *The Tempest* (I, 1, 486):

My *spirits,* as in a dream, are all bound up.

In *Love's Labor's Lost* (IV, 3, 306):

Universal plodding prisons up
The nimble *spirits* in the arteries

Of similar nature are Shakespeare's references to the fumes or vapours rising up to the brain and producing definite effects as referred to previously in Burton and others. Thus in *Cymbeline* (IV, 2, 301), he writes:

'Twas but a bolt of nothing, shot at nothing
Which the brain makes of *fumes*

In *The Tempest* (V, 1, 59):

And as the morning steals upon the night,
Melting the darkness, so their rising senses
Begin to chase the ignorant *fumes* that mantle
Their clearer reason.

In *II Henry IV* (IV, 3, 106), in referring to sherris, he says:

It ascends me into the brain; *dries* me there
All the foolish and *dull* and *crudy vapours*

He further speaks of the brain "as dry as the remainder biscuit" *(As You Like It,* II, 7, 38), of "boiled brains" of "a hot braine," of a "heat-oppressed brain," et cetera. When Laertes sees Ophelia in her mad state, he thirsts for active and quick vengeance; he cries out *(Hamlet,* IV, 5):

O heat, dry up my brains!

.

By heaven, thy madness shall be paid by weight
Till our scale turn the beam

recalling the doctrine of the period that "Heate maketh men bolde, quick of motion and headlong in their actions."[6]

A great many more quotations of similar nature could be cited to prove further how much of a child of his age our poet really was and how truly he reflected the general knowledge of his period. However, we shall pursue this point later but only in relation to other aspects of the medicine and psychiatry of his age.

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12. Quoted in Laurentius, Op. Cit., p. XXI.
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Listen—and You Be the Judge

Among the important attributes of MSMS membership is the opportunity to participate in our group sickness and accident insurance plan which was inaugurated almost three years ago. The loss of income through disability constitutes one of the most serious hazards confronting members of our profession. The leaders of your Society spent more than two years working out the specifications of the MSMS plan so that it was especially tailored to the needs of Michigan M.D.'s.

Through the force of our collective purchasing power we are able to secure insurance protection to our own specifications at a cost considerably lower than we would pay as individual physicians. Approximately half of the MSMS members outside of Wayne County have taken advantage of the plan to date.

In order to increase service to participants in the MSMS plan, with regard both to claims and to information on terms of the policy and its benefits, a new full-time representative has been assigned to Michigan by the Provident Life & Accident Insurance Company, the carrier unanimously selected in 1953.

With the approval of The Council of MSMS, this representative will call personally upon MSMS members throughout Michigan. He will present an introductory card bearing the name and seal of the Michigan State Medical Society. His time is valuable, but he realizes that your time is even more so. His visits will be brief.

I feel it will be to your advantage to pay the Provident man the courtesy of seeing him as quickly as possible, whether or not you are now a member of MSMS group plan for sickness and accident insurance.

When you participate in the MSMS life and accident program, you should not consider cancelling any insurance you now may hold. There are many other advantageous health and sickness policies, especially those sponsored by local medical organizations and the various specialty groups. Remember—very few members of the medical profession carry adequate insurance to make up for loss of income in the event of prolonged illness or disabling injuries.

To the younger practitioner, the MSMS plan is an excellent foundation; for the older man it is a valuable supplement to other insurance already in force.

I urge you to learn the full story of the MSMS life and accident plan. It is presented on its own merits. In the end, you are the judge.

W. D. Jones.

President, Michigan State Medical Society

President's



Message

Editorial

MICHIGAN MEDICAL SERVICE

THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY for the eighth consecutive year is devoting a special number to the honoring of Michigan Medical Service. In June, 1948, we celebrated the passing of the one-million-member mark, the first Blue Shield Plan to achieve that distinction. On the 1948 cover of THE JOURNAL was a picture of General Paul Hawley, then National Executive Secretary of the Blue Cross-Blue Shield National Commission, presenting the plaque to our own President, Robert L. Novy. Observing were L. Howard Shreiver, President, Blue Shield Commission, and Jay Ketchum, our Executive Vice President.

Each year since, the Society has continued to devote the June issue to its most outstanding accomplishment in the field of medical care and distribution.

VOLUNTARY HEALTH CARE PLANS AND THE FUTURE

For at least twenty-five years, a determined and concerted effort to bring about compulsory government-sponsored or paid and administered health service has persevered. The depression of the 1930's almost made this effort successful. Partial or complete indigency was the almost constant problem when and if a medical emergency arose. Socializers and politicians offered, and during the depression delivered, government-regulated and paid care for those unable to provide for themselves.

The hospitals and the doctors, through individual and co-operative effort, accepted as their responsibility the challenge of health care and a method of paying for it for the financially desperate majority of our people. The prepayment voluntary non-profit hospital and medical-surgical plans were the result. The insurance companies had refused to sponsor any plan, saying health care was uninsurable and there were no actuarial records from which to work.

The insurability of health was proven by trial and costly error, but by the end of that decade our voluntary service plans had received their accolade. It took another five years to iron out the mistakes and establish a success formula in a previously untrodden financial field.

Medical pioneers and hospital administrators had recognized a growing social need and shown the way to its relief. The service plans, both hospital and medical, have and will continue to supply the public needs. During those years of desperation, the tremendous urge for national socialization was stopped before it had completely captured the health field.

Senator Vandenberg, at his request, met with a group of officers of the Michigan State Medical Society and Michigan Medical Service, for a searching conference into the objectives and activities of the Michigan Blue Cross and Blue Shield. He assured them that by their great success they had stopped the drive for socialized medicine and could hold it off as long as they were able to supply on a voluntary basis the medico-economic needs of our people. He said, however, that if for any reason we fail, government medicine will take over within a year.

Time of Trial

Has that time come? Bud Goodman in his last article in the *Detroit Free Press,* Sunday, April 1, 1956, quotes the Federal Security Administration as saying that when medical service plans become a success after experimentation by the doctors, and large numbers of the people become subscribers, "the public should take over the management and administration." Further he says, "Many civic leaders, claiming Blue Shield is a 'how to pay' plan for the public, believe control should rest with the public."

Labor leaders in Michigan and elsewhere for the past several months have restated their desire and ultimate goal to be "government health services at no cost to the consumer." They admit they are using the Blue Cross-Blue Shield plans because they are the best program available, but as soon as possible they will demand the fulfillment of their unchanging goal.

Joseph A. Navarre, Commissioner of Insurance, State of Michigan, in an address presented to the 1956 Annual Conference of Blue Cross and Blue Shield Commissions at Hollywood, Florida, April 8, 1956, said:

"The Blue Cross-Blue Shield Plans are experiments involving dynamic forces, social and economic. They were designed to meet public needs within the framework of our way of life under the free enterprise system of our constitutional democracy. The fact that these plans were created as an 'answer' to the cry for 'socialism' of health services is a significant historical fact. . . . The inventive genius of America will devise a means to provide health care within the financial reach of the majority of the populace. If the present methods fail, a compulsory tax-supported plan may well be the substitute experiment."

The gist of his speech was that if the hospitals and doctors are unable to give the subscribers the protection and services which they demand, eliminate the faults and control the abuses, the state governments must assume the management and *make* the plans deliver the services needed. The implication was that the government will take over or institute its own program.

Confident of Future

The medical profession has no fear but that the Blue Cross-Blue Shield Plans will continue to operate as they have in the past. They have pioneered and succeeded in solving the great socio-economic problem of distribution of medical care to great masses of people who otherwise did not have opportunity or means to escape the dole. We now face more but similar obstacles.

There are internal problems. Management can and will continue to look after the business and administration of plans. The enthical problems, as they arise, are the resposibility of the Medical Society and the Hospital Association. The medical care plans are creations of the two groups, the medical profession as represented by the Michigan State Medical Society, and the hospital profession as represented by the Michigan State Hospital Association. MMS and MHS are accomplishing certain delegated functions in which ethics and the policing of the two professions are not included.

If failure should come to either Blue Cross or Blue Shield or both, it will be due to failure in solving the alleged abuses, and especially our inability to merit the confidence of the subscribers in sufficient numbers to make the plans economically workable. Since it was organized, Blue Shield has worked miracles. It has given medical and surgical care through private industry and self payment to countless thousands of low income persons. For these people, this care must be continued if the profession is to accept its responsibility. The policies covering this group must be continued without being priced out of their reach, else the main objective has been lost. Premium rates for the $2,500 income contracts have not been increased for about twelve years, although the fees paid to doctors have increased in many specific services. Because of different economic conditions, the low-income people are finding that paying for this protection is more difficult than ten or twelve years ago—in everything else, their money buys not half so much.

The bureaucrats of government and other entrenched administrative groups always seek to take charge of and run the projects which have been proven successful, and thereby disclaim the failures. The "do-gooders" in the security departments of government and of unions are now desperately trying to gain control of the great public trusts the health pioneers have built. Union leaders are now demanding more voice in management. In Michigan, we have the first "governmental investigation" to "find means to furnish more and more satisfactory services at less cost."

Blue Shield will continue to serve all groups of our subscribers as long as those services are acceptable to our patients. Our doctors have a professional and solemn duty to respect the inherent privileges of our public. The only cause of a possible future collapse of the voluntary prepaid health plans would be our doctors themselves.

The reiterated future ambitions of security agents and the controls they hope to dominate still confront us. With the full co-operation of all our doctors, the practice of medicine faces a glorious heritage. We have no fear. The continuation of the co-operation given over the past twenty years will assure the men of medicine a guaranteed place in the sun.

GOVERNOR'S STUDY COMMISSION

The Governor's Commission has finished its taking of testimony. The Insurance Department, Labor Leaders, Michigan Hospital Service, Michigan Medical Service, Michigan Hospital Association, Michigan State Medical Society, the State Osteopathic Association, the State Osteopathic hospitals have all prepared statements and have been questioned without limit. The Commission

was charged with determining "how more and better medical and hospital services can be assured more people with less criticism, costs be decreased and wastage and abuses be controlled or eliminated."

Several items stand out.

1. *Hospital Costs.*—Hospital costs per diem are increasing and will undoubtedly continue. From 67 per cent to 80 per cent of hospital expense is labor. Hospitals must compete with industry in the labor market. Labor leaders have seen to it that costs are more. Hospital housekeeping—supplies—food—drugs, all have advanced, but less than wages.

2. *Utilization.*—This item probably raised the most argument. The trend in our free economy—our decreased morbidity and mortality and our longer life expectancy—has been corollary to better and more health care. The hospital instead of being the place to die, is now the place to get well. Infant mortality has decreased as hospital deliveries have increased. People are using hospitals more. Overstay was stressed—convenience or accommodation. It is found that many times the whole family works, leaving no one home to care for the convalescent. The convenience of using the hospital causes increased utilization rates but such people, when all are working, should be willing and able to carry their own extra load instead of charging it to the community—as they are doing.

3. *Misuse of Facilities.*—This item includes hospitalization for diagnosis which is not covered by the contract but is an outstanding abuse. Contract holders, having paid premiums, wish these services rendered—even demand such attention. They have insurance; why not use it? Another item is the doctor. He has been taught all the diagnostic and investigation tricks and uses "the works" when the patient is hospitalized and "someone else" is paying. Unnecessary procedures make for unlimited costs.

Doctors are expected to give their patients the best and most suitable service. Many have not yet learned that costs also are great items in the care of patients. Unnecessary costs must be avoided.

4. *Administration.*—Charges have been made repeatedly that nothing has been done by the hospitals or doctors to correct the abuses which have been reported.

The Solution?

This raises the question—Who is at fault?

1. The doctors. Doctors have been given that honor by some very vociferous groups.

2. Hospital administrators. Administrators who wish their hospitals to operate at as nearly full capacity as possible, and with no deficit, are under censure.

3. Blue Cross-Blue Shield management. The function of management is to operate a business successfully. Blue Cross and Blue Shield are selling services—medical, surgical, hospital. Financial and administrative matters are their forte. Unprofessional or unethical behavior is and should be referred to the respective hospital and medical societies.

4. Michigan Hospital Association - Michigan State Medical Society. Their problem is educational and policing of their own members. MSMS has spent many thousands of dollars and untold days of the executive officers' and committees' time in making surveys, studies, and carrying the story to the people in their home communities.

5. The subscribers. This is the largest group. If the subscribers had been satisfied with the original concept of our pre-payment plans—to care for the (at that time) catastrophic hospital trip, and had been willing to furnish their own miscellaneous care, all would have been well. But from the very start, the demand has been for more and ever more protection. All these things cost money. The subscriber should accept that fundamental truth.

Who is at fault? Every group mentioned. Who wants Blue Cross-Blue Shield to close their doors? *No one.* Then all must contribute their efforts to preserve this boon to ourselves. Education of all groups is the only out. The medical men have been most criticized, but have given the most service—established the Plan and made it a success.

They have for years made repeated efforts to abate the abuses. It has been felt, however, that it is better to have some abuse rather than to deny worthy need to the helpless.

Three MSMS Presidents-for-a-Day

MMS President Emeritus, President and Vice President



Robert L. Novy, M.D.

Dr. Robert L. Novy, President Emeritus of Michigan Medical Service, is the newly elected President of the National Blue Shield Medical Care Plans. The first elections to be held by the Plans themselves, for this office and that of president-elect, took place at their 1956 annual meeting. Previously, officers were elected by the Blue Shield Commission, the national co-ordinating body for the Blue Shield Plans. Dr. Novy has filled, and continues to fill a number of other national berths. In 1954-55, he was Vice President of the Blue Shield Commission, and he is now one of their nine commissioners-at-large. Dr. Novy was elected a member, for a three-year term ending in 1957, of the AMA Council on Medical Service, and he is one of the six Michigan delegates to the AMA House of Delegates.

Dr. Novy was President of MMS from 1942 until September, 1955, when he resigned. He has served on the MMS Board of Directors since 1941 and on the Board of Trustees of the Michigan Hospital Service since 1948. An internist and cardiologist, Dr. Novy is a past president of the Detroit Board of Health and has been Professor of Clinical Medicine at Wayne University Medical School since 1922.

Dr. Wilfrid Haughey, President of Michigan Medical Service since October, 1955, has been an active proponent of the principle of prepaid medical care since 1932. He was elected to the first MMS Board of Directors and became its first Vice President, in which capacity he served continuously until his election to the presidency. In addition, he was a member of the Board of Trustees of Michigan Hospital Service from 1939 to 1948, and of the Executive Committee from 1944 to 1946. Dr. Haughey, who is still in active EENT practice in Battle Creek, was secretary for many years and then president of the Calhoun County Medical Society. He was editor of their Bulletin for 12 years and has been Editor of The Journal of the Michigan State Medical Society for seventeen years, from 1910 to 1913 and from 1942 to date. He has served as Secretary of the State Society and as its representative to the House of Delegates of the American Medical Association. At its annual meeting in 1955, the Michigan State Medical Society presented Dr. Haughey with a plaque in recognition of his forty-five years of service to the profession.



Wilfrid Haughey, M.D.



L. Fernald Foster, M.D.

Dr. L. Fernald Foster was elected Vice President of MMS in October, 1955, to succeed Dr. Haughey. Dr. Foster was an active participant in the development of MMS and, except for the years 1943 and 1944, has been a member of the Board of Directors since its inception. In 1943, he was president of the National Conference on Medical Service. A Bay City pediatrician, Dr. Foster has served as secretary of the Bay County Medical Society since 1921, and as Secretary of the Michigan State Medical Society since 1936. He is at present also Secretary and Business Manager of The Journal MSMS and secretary of the Michigan Heart Association.

Michigan Medical Service

Yesterday-Today-and-Tomorrow

What does Blue Shield mean to the physicians of Michigan? More especially, what does it mean to the members of the Michigan State Medical Society who are actively engaged in the private practice of medicine? Does it have the same meaning for those whose practice started after Michigan Medical Service became a going operation as it does for those whose practice antedates its birth?

Michigan State Medical Society membership totals roughly 6,000; of these, about 4,800 are engaged in active practice. Approximately half of the latter group started their practice after the depression years, without the experience of practicing in an atmosphere devoid of a voluntary prepayment medical care plan. This lack of personal experience with the kind of economic problems that gnawed at medical practice in the earlier years may, in part, account for the negative attitudes toward prepaid medical care demonstrated by some of these men. These are the men who take for granted the benefits of MMS, who regard it as merely a collection agency, who do nothing positive to further its cause, who cavil about its limitations or even question the need for its existence. This same negative spirit is manifested by those in the older group who could not or would not become part of the changing medical order, who resisted any change in the medical status quo.

Of both groups—neither of which constitutes a large percentage—it might be said that they are somewhat lacking in perceptual and perspective acuity. They fail to recognize that (1) a voluntary prepaid medical plan is essential to better distribution of care, (2) the interests of both the physicians and the public are best served by professional, rather than government or exclusively commercial, sponsorship of such a plan, and (3) without an adequate plan sponsored by organized medicine, the field would be left to the commercial carriers, who would in time price insurance out of reach of low-income groups so that government-sponsored and controlled health plans would be inevitable.

For most of us, the medium in which Michigan Medical Service took root, the history of its growth, and the tremendous progress made during its 16 years of existence establish the inevitability of a plan such as MMS and the wisdom of the direction in which it has been guided.

As early as 1930, twenty-five countries had already adopted some form of compulsory health insurance and seventeen countries had voluntary plans. Conditions in our own country were such that the do-gooders, socializers, and labor leaders were proposing for this country the government-controlled medicine that had evolved in England, Germany and elsewhere. In Washington, the move toward compulsory health service was gaining momentum and numerous bills were getting concentrated attention from Congress. The objecting voice of organized medicine was perhaps the loudest among the few groups that actively opposed such legislation.

But obviously, we could not confine our efforts to merely objecting. The nation's ills demanded positive action. Depression years stretched behind and ahead of us. The 1930's were years of deprivation, years of tragedy, years when most of our people were lucky if they could afford the daily necessities, and altogether too many were in the ranks of the indigent. Many more were "medically indigent." The problem was compounded when hospitalization was involved. Hospitals were reluctant to accept the patient unless payment was guaranteed. Frequently it was the doctor who was the guarantor.

The doctors themselves presented a rather sad economic picture. Only 50 to 60 per cent of the private patients were paying their doctor bills, and payment was too frequently stretched out over a long period of time. Most doctors simply sat it out, hoping that the patients who were able to pay would remember their indebtedness. Sending bills was the practice of only a few doctors, those with better business training.

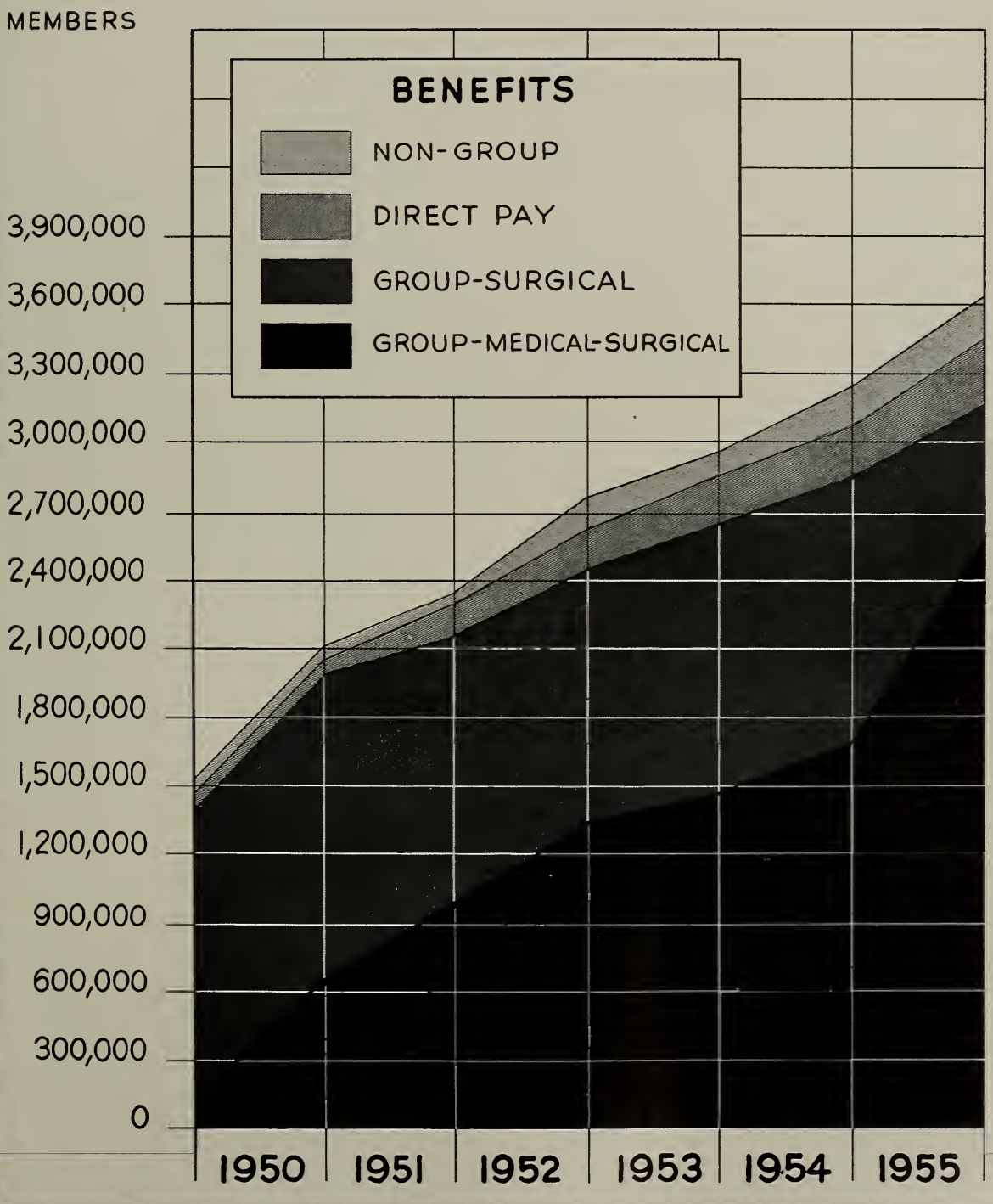
Typical of the times was a question put by a Harvard Medical School professor to the members of a postgraduate class. He asked whether there were any doctors in Michigan who ever *grossed* as much as $5,000 a year. He commented that very few of his friends grossed that much, but he had heard of "easy conditions in the West."

A survey by our State Medical Society showed that in 1931 the average physician *netted* about $3,876 per year. A study of family incomes in Wayne County for the same period showed that 140,000 families (31 per cent) had gross incomes under $2,000. Of this number, 98,000 grossed less than $1,800, 68,000 less than $1,600, 47,000 less than $1,400, and 24,000 families grossed less than $1,200. A substantial and growing number of families were without any income and were totally dependent on charitable organizations. The people were desperate, the public relief agencies were overwhelmed, and the doctors were caught in the middle.

And so it was that many doctors in many parts of the nation began studies in search of a solution. Here in Michigan, a number of state and county medical society committees instituted studies on medical care costs and the myriad problems re-

MICHIGAN MEDICAL SERVICE

ENROLLMENT COMPARISON
ALL TYPES OF CONTRACTS
1950 THROUGH 1955



lated to a plan for bringing medical care within the reach of all the people.

Some prepay clinics were started and promptly received the AMA stamp of disapproval. Our own efforts to secure the AMA's guidance and aid in establishing a prepayment plan in Michigan netted only reproof. We were told to practice good medicine and leave insurance to the insurance companies. In fact, it wasn't until 1946, six years after Michigan's own plan was well launched, that the AMA officially endorsed the principle of voluntary prepayment for medical care.

Of course, we could not leave it at that. Medical care problems in our state were too pressing, and our professional responsibility for their solution was not so easily sloughed off. Commercial insurance companies were not the answer. They offered only limited indemnity insurance, and even this was well out of reach of the majority of the people. When we approached the commercial carriers with our suggestions, they contended that the kind of medical service we proposed was not insurable.

Again we as a state medical society were thrown back on our own resources to devise methods for alleviation of the growing medico-economic difficulties in which the doctors and the public were equally embroiled.

The long hard years of work, of surveys, reports and plans of the medical society committees are in themselves a book-length history. By March, 1940, when Michigan Medical Service opened its doors for business, the committees had ironed out innumerable problems and had overcome what had seemed insuperable obstacles, the Group Medical Care Enabling Act had been passed by the state legislature, and 82 per cent of the members of MSMS had affixed their signatures to a guarantee of services under the plan.

Though the first two years of operation were anything but smooth, the Blue Shield Plan in Michigan has proved right in principle and right in design. It operates under the jurisdiction of the state insurance commissioner, but it is definitely not an insurance company. Michigan Medical Service is a service corporation, for which we the members of MSMS are fully responsible. In essence, we are that service corporation.

Altruism was not our sole motivation, however, for in helping to solve the community problems, we extricated ourselves from our economic dilemma and also established a bulwark against compulsory health legislation. As Senator Vandenberg commented to a group of our officers some years ago, there is little chance of government intervention as long as Blue Shield, and its companion hospital prepayment plan, Blue Cross, operate effectively.

Our recognition that a voluntary prepayment plan is a necessity for more than just the very low income groups is one of the essentials of effective operation. The needs and the wishes of the people of Michigan for such coverage is well demonstrated by MMS's present membership of more than three and a half million, more than half the population of the state.

That the plan well serves the interests of the physician is equally well demonstrated. The mode of payment is unquestionably an advantage to him. When he renders service to a Blue Shield member, payment of fees is guaranteed. He is not dependent on the patient's willingness to pay, as he is when there is no coverage or when a commercial insurance carrier is involved and the check is sent not directly to the physician, but to the patient.

No one can gainsay Blue Shield's role in improving the over-all economic situation of physicians in Michigan. Contrast the average physician's income in the 1930's, when he "rarely grossed $5,000 per year," with his situation today. In 1955, MMS paid out to 6,237 a total of $31,-883,215. On the average, that would be a little over $5,100 each. Obviously on an individual basis, many received far more than that average, many far less. Nevertheless, it is an imposing picture. And this, remember is income from Blue Shield alone and just a portion of his total income.

The degree and methods of competition with Blue Shield adopted by commercial insurance companies are indications of the proportions the plan has attained and constitute incontrovertible evidence of the fallacy of their original stand that medical service was not insurable. The Michigan State Medical Society assumed the original risk and obligations and worked out the actuarial problems, and the commercial carriers have shown no reluctance to profit from our experience. We do not object to their offering benefits similar to those in the Blue Shield contract. On the contrary, we feel that we have rendered another community service by establishing such a high level of benefits that the commercial companies are forced to approach it in order to stay in business. We do not always approve of their methods of selling policies, but certainly we approve of the trend toward shifting emphasis from rates to benefits.

Since Michigan Medical Service is in essence the Michigan State Medical Society, and since we provide both the coverage and the services, with free choice of physicians, we are in a unique position in the state and the commercial companies cannot entirely duplicate our contracts. Some have tried to represent their policies as having the same advantages as those of a Blue Shield contract. A case in point is of recent development. A company selling in Michigan, and claiming American Medical Association approval, pays fees similar to those in the MMS schedule. The company's agent has been telling prospective insurants that MSMS has established definite surgical fees chargeable to all families with $2,500 or $5,000 income limit and that physicians are obligated to accept these fees whether the patient

MICHIGAN MEDICAL SERVICE PAYMENTS TO DOCTORS OF MEDICINE BY COUNTY OF RESIDENCE 1940 TO DECEMBER 31, 1955

	Total	% of Total
Alcona	$ 44,071.75	.02
Alger	17,751.50	—
Allegan	427,220.00	.24
Alpena	866,016.87	.48
Antrim	34,640.75	.02
Arenac	100,597.50	.06
Baraga	100,187.50	.06
Barry	156,370.85	.09
Bay	2,635,988.82	1.45
Benzie	74,038.25	.04
Berrien	1,283,902.96	.71
Branch	506,370.60	.28
Calhoun	1,771,802.08	.98
Cass	88,843.50	.05
Charlevoix	210,577.00	.11
Cheboygan	353,872.50	.20
Chippewa	1,144,108.75	.63
Clare	41,436.75	.02
Clinton	653,448.75	.36
Crawford	135,825.75	.08
Delta	467,831.50	.26
Dickinson	309,270.00	.17
Eaton	387,078.62	.21
Emmett	939,995.52	.52
Genesee	11,201,372.96	6.17
Gladwin	70,216.49	.04
Gogebic	186,480.90	.10
Grand Traverse	1,049,940.20	.58
Gratiot	360,176.00	.20
Hillsdale	549,313.97	.30
Houghton	485,051.00	.27
Huron	435,874.75	.24
Ingham	6,131,153.50	3.38
Ionia	547,776.00	.30
Iosco	97,062.00	.05
Iron	60,595.00	.03
Isabella	622,828.50	.34
Jackson	1,024,472.83	.56
Kalamazoo	2,388,056.20	1.32
Kalkaska	6,849.25	—
Kent	7,342,011.35	4.04
Keweenaw	2,205.50	—
Lake	6,749.75	—
Lapeer	395,045.75	.22
Leelanau	$ 90,343.50	.05
Lenawee	628,463.25	.35
Livingston	255,950.00	.14
Luce	105,197.00	.06
Mackinac	16,595.00	.01
Macomb	2,636,853.15	1.45
Manistee	122,117.75	.07
Marquette	672,185.89	.37
Mason	246,177.00	.13
Mecosta	218,886.25	.12
Menominee	192,833.00	.11
Midland	103,792.90	.06
Missaukee	101,674.25	.06
Monroe	595,364.75	.33
Montcalm	381,263.25	.21
Montmorency	10,578.00	.01
Muskegon	1,580,766.68	.87
Newago	134,807.20	.07
Oakland	9,777,475.90	5.39
Oceana	274,600.00	.15
Ogemaw	271,302.75	.15
Ontonagon	167,964.25	.09
Osceola	235,393.25	.13
Oscoda	1,891.00	—
Otsego	114,389.54	.06
Ottawa	936,861.80	.52
Presque Isle	220,586.75	.12
Roscommon	16,740.25	.01
Saginaw	5,560,735.11	3.06
St. Clair	2,135,792.25	1.18
St. Joseph	329,931.49	.18
Sanilac	253,584.50	.14
Schoolcraft	137,447.25	.08
Shiawassee	1,185,895.25	.65
Tuscola	451,318.85	.25
Van Buren	733,313.00	.40
Washtenaw	6,676,605.24	3.67
Wayne	78,229,372.47	43.09
Wexford	475,786.25	.26
Total Payments to Michigan M.D.'s	$161,995,316.94	89.23
Outside Michigan, etc.	19,551,795.81	10.77
Grand Total	$181,547,112.75	100.00

carries Blue Shield or commercial coverage. Were this not so, says the agent, then Michigan Medical Service would be subject to monopoly charges. For example, the company pays $40.00 for a tonsillectomy with $5,000 income limit coverage. MMS pays $42.50 in such a case. According to the company, the insurant need pay the doctor only an additional $2.50.

The only comment one can make is that either the company is very much deluded or that it is guilty of deliberate misrepresentation to the public.

A simple answer to such an insurance company is that Michigan Medical Service, the medical men of Michigan, have sold guaranteed services, not an indemnity amount. The only precedent established is full payment for certain claims. As member doctors owe nothing to the insurance company, and have made them no promises, our own guarantee of service made our plan possible.

We, the physicians of Michigan, cannot afford to delude ourselves about any aspect of the prepayment medical care picture, about the public's need for prepaid care, or about the certainty of our future.

True, we are no longer in a depression period, but the medical costs involved in a serious illness or accident still constitute a threat to family security. The Consumer Price Index of the Bureau of Labor Statistics shows that the comparative cost of medical care today is higher than ever; it is difficult or impossible for most families to pay such costs out of personal savings.

With respect to our future, Michigan Medical Service is not so firmly ensconced that it requires no public defense, as witness the current interrogations by the Governor's Study Commission on Prepaid Hospital Care, which involves Blue Shield as well as Blue Cross. The recent newspaper series on doctors and Blue Shield, triggered by UAW complaints, is also some indication of our vulnerability. Too, we cannot afford to overlook the repeated statements from union leaders that labor's ultimate goal is compulsory health insurance.

None of us wants either government-controlled medicine or control of the field by profit-minded commercial carriers. These are the likely alternatives if we fail to keep pace with the needs of the public or if we as individuals actively or passively undermine Michigan Medical Service. With either alternative, doctors will have little or no say in program management. For our own sake as well as that of the people we serve, let each and every one of us work to preserve and to further the principles upon which Michigan Medical Service was founded.

Case Reports and Payments

If you have encountered what you consider unreasonable delay in receiving payment from Michigan Medical Service for Blue Shield services, you are one of the few exceptions to the rule. A careful survey shows that, despite the fact that Michigan Medical Service has grown to the point where it now receives approximately 90,000 claims each month, in about *75 per cent of cases* payment is made to the doctors *within 25 to 30 days* of receipt of the Doctor's Service Report.

A good deal of the credit for Michigan Medical Service's ability to process the Service Reports for payment in this minimum length of time goes to the large number of doctors who recognize the expediency of submitting a complete report of the procedure performed, as promptly as possible, and employing, whenever applicable, the standard nomenclature and the code numbers listed in the Physician's Manual (Blue Shield Schedule of Benefits).

Delayed payment to doctors, in the remaining 25 per cent occurs when reports cannot be handled by primary examiners, but must be referred to senior claims examiners. An incomplete Service Report is the reason in most of these instances, entailing loss of time because of the need for queries to and additional correspondence with the doctor. This occurs most frequently in reports on so-called minor services, such as emergency first aid in the doctor's office and in reporting the fifteen office surgical procedures. There is a tendency, for example, to leave out essential details such as size and depth of wound, number of sutures, number of lesions, and anatomic location of lesions. Such omissions are sometimes responsible for underpayment as well as delayed payment.

Of course, some delay is unavoidable when the procedure performed is an unusual one, not listed in the Schedule of Benefits or involving procedures that are subject to individual consideration for determination of fee. Such cases in which the fee cannot be determined by the staff claims examiners or by the Medical Director, are referred to the Medical Advisory Board, which meets twice monthly. Even in these cases (a maximum of about 150 per month) processing and payment can be speeded up if the doctor gives a complete report of details and includes a copy of the Operative Record with the Service Report.

To reduce the waiting time, Michigan Medical Service processes claims as rapidly as possible and pays claims three times a month, on the 6th, the 16th and the 26th. Those doctors who have tended to make sketchy Service Reports and have in consequence waited long periods before payment, could reduce the waiting interval in their particular cases by following the reporting suggestions offered here. A well-instructed secretary, with easy access to the Schedule of Benefits, could increase our twenty-five to thirty-day payment group well above 75 per cent.

Michigan Medical Service

Professional Relations Department



Thomas C. Paton
Asst. Dir. of MMS Responsible for Prof. Relations Activity

Pictured below are MMS's field representatives, whose service areas are shown on this and the opposite page. They are available for consultation on your problems and questions related to Blue Shield and will train your office assistant in handling of service reports.



William W. Boyles
Manager, Dept. of Prof. Relations



Verne Collet
Area 1



Helen M. Schick
Area 1



Harry J. Parke
Area 2



Charles Rickett
Area 3



Robert McDonough
Area 4



Robert Morse
Area 5



Anton J. Patti
Area 6



Rudolph Bolich
Area 7



Kathryn Topp
Area 8



Russell J. Burns
Area 9

Blue Shield Income Limits

A *Doctor's Dilemma*

Most of the members of the Michigan State Medical Society have signified, by prominent office display of the plaque addressed "To All My Patients," their willingness to discuss fees and services with their patients. They have also expressed willingness to discuss the patient's income when Blue Shield coverage is involved. Many, however, are reluctant to initiate such discussion, either because they regard it as a responsibility resting entirely with the patient or because they have not worked out the mechanics of such a discussion.

The doctors who routinely introduce the subject when the patient's need for hospitalization is disclosed are firm in the belief that they thus help to maintain the best possible doctor-patient relationship. In accepting the responsibility as their own, they recognize that (1) the patient may be reluctant to bring up money matters because he feels that it might offend the doctor or because he fears that his concern with charges will influence the quality of medical care he receives, (2) the patient may be so taken up with his present illness that the matter of cost is temporarily thrust to the back of his mind, or (3) for lack of understanding, the patient may simply assume that, no matter what his income, if he has Blue Shield coverage Michigan Medical Service will pay the total fee.

The doctors who neglect or refuse to clarify the matter of fees and responsibility for payment seem to end up with the greatest number of complaints about overcharges. Those who tackle the problem at the first opportunity report that they have no complaints or a negligible number. Most of the difficulty among the former group has to do with how to broach the subject and what to say. They might find it a simple matter if they could tune in on the doctors who have been handling the matter successfully.

One participating doctor reports, for instance, that he asks each patient who is going to be hospitalized what kind of coverage he carries. "If it is Blue Shield, I note from the service code number on his identification card whether the income limit of the contract is $2,500 or $5,000. I then ask whether his annual family income (including that of other earning members of his immediate family) during the past three years has averaged more than or less than the income limit of his Blue Shield contract. (For single persons the income limits are $2,000 and $3,750, rather than $2,500 and $5,000. For persons retired under a formal company retirement program, the period used to compute average income is the three months immediately preceding the date of service; the income for the three-month period is then multiplied by four, since it is the annual income which is used as a base. In reference to retirement cases, the term "income" shall include, but shall not be limited to, all pension payments, retirement income payments, old age benefits, unemployment compensation, social security payments, and annuities.) When the average income is in excess of the contract limit and the amount paid by MMS is less than my usual fee for the particular service involved, I point this out to the patient and tell him that I will bill him directly for the difference. When he is under the income limit, in accordance with my agreement with Michigan Medical Service I tell him that I will waive my usual charge and accept the amount paid by MMS. This would apply, for example, if he carried a $5,000 contract and aggregate family income had averaged only $4,500 over the three-year period. If he has any questions, I answer them then and there. Thus there is no doubt in his mind as to his financial obligation and no basis for later complaint about charges. I invest about five minutes in each case and thereby save myself a great deal more time and trouble."

In many offices, information regarding Blue Shield coverage and fees is well handled by the doctor's office assistant. The doctor can instruct her with respect to his fees, and the MMS area representative can give her full information on the method of reporting services. She can also consult the representative whenever she finds it necessary. It is perhaps easier for the office assistant, or secretary, than for the doctor to query the patient, since it is frequently she who obtains personal identifying data from the patient, collects fees, issues receipts and handles other business aspects of the doctor's practice.

When she has ascertained that the patient carries Blue Shield coverage, she can easily ask to see his subscriber identification card. The service code tells her whether the contract income limit is $2,500 or $5,000 ($2,000 or $3,750 in the case of a single person). She does not need to ask the *exact* amount of average income, but only *whether this is more or less than* the contract limit. If more, on instruction from the doctor she can tell the patient the specific amount over and above the fee paid by MMS which the patient must pay, or she can tell him that the fee that the doctor will receive from MMS will not fully pay for the services given the patient and that he can expect a statement for an additional charge. If the patient's family income has averaged less than the contract limit, the secretary can inform the pa-

MAP OUTLINING AREAS SERVED BY MMS PROFESSIONAL REPRESENTATIVES



AREA OFFICES

1. 441 E. Jefferson, Detroit
2. 210 W. Washtenaw, Lansing
3. 510 American Nat'l Bank Bldg., Kalamazoo
4. 752 Keeler Bldg., 60 Division St., N., Grand Rapids
5. 408 State Bank Bldg., Front & Union Sts., Traverse City
6. 408 W. Huron St., Pontiac
7. Room 11, Union Nat'l Bank Bldg., Marquette
8. 209 Davis Hill Arcade 511 Center Ave., Bay City
9. 801 First Nat'l Bldg., Main & Washington Sts., Ann Arbor

** Plainwell is included in Area #3

LIST OF COUNTIES COVERED IN EACH SERVICE AREA

AREA #1: Wayne.
AREA #2: Livingston, Eaton, Ingham, Clinton, Genesee, Shiawassee.
AREA #3: Branch, St. Joseph, Cass, Berrien, Van Buren, Kalamazoo, Calhoun, Barry.
AREA #4: Allegan, Ottawa, Kent, Ionia, Montcalm, Muskegon, Oceana, Newaygo, Mecosta.
AREA #5: Mason, Lake, Osceola, Clare, Gladwin, Manistee, Wexford, Missaukee, Roscommon, Ogemaw, Benzie, Grand Traverse, Kalkaskee, Crawford, Oscoda, Alcona, Leelanau, Antrim, Otsego, Montmorency, Alpena, Charlevoix, Emmet, Cheboygan, Presque Isle.
AREA #6: Oakland, Macomb, St. Clair, Lapeer.
AREA #7: Mackinac, Chippewa, Luce, Schoolcraft, Alger, Delta, Menominee, Dickinson, Iron, Marquette, Baraga, Gogebic, Ontonagon, Houghton, Keweenaw.
AREA #8: Gratiot, Saginaw, Tuscola, Huron, Sanilac, Isabella, Midland, Bay, Arenac, Iosco.
AREA #9: Monroe, Lenawee, Hillsdale, Jackson, Washtenaw.

tient that the doctor will accept as full payment for the in-hospital medical or surgical service the amount paid by Michigan Medical Service. In some of these cases she may have to tell the patient that the doctor may make additional charges for office care before and after hospitalization, since such care is not covered by Blue Shield.

Should the doctor feel that a particular patient's statement as to income is inaccurate, he may request that the MMS representative obtain from the patient a notarized affidavit of earnings. This includes the earnings of each member of the immediate family for the three years (or three months if the subscriber is retired) preceding the date of service. If the doctor, on reviewing the affidavit, is doubtful of the veracity of the statements contained therein, MMS will employ the services of an investigating agency to check further.

The need for such measures does arise, but only infrequently. In general, when the doctor manifests trust in the patient and employs a frank approach, the patient tends to respond with equal frankness. The doctor whose usual fees are in excess of those listed in the Blue Shield fee schedule and who fails to present, in advance of hospitalization, a clear picture of the patient's financial obligation, particularly when Blue Shield coverage is involved, does the patient a disservice and at the same time undermines the patient's faith in him, in his profession, and in the voluntary prepayment for medical care.

Their Raison d'Etre

Today's economic conditions are a vast improvement over those prevailing during the years that fostered the founding and growth of Michigan Medical Service, so much so that the economically untutored are inclined to believe the total picture to be far brighter than is factually disclosed. Consider the questions—and their implications—recently heard in medical circles:

"Is there really any present day need for Blue Shield to continue contracts with an income limit as low as $2500?"

"Doesn't Blue Shield coverage of subscribers with income as high as $5000 run counter to the original intent to cover fully only families bordering on medical indigence?"

The first question indicates lack of awareness that there is still a sizable segment of the population with incomes of less than $2,500, including persons living on retirement incomes or pensions and young people who, having reached the age of nineteen, are ineligible for inclusion in the family contract. It is estimated that approximately 20 per cent of the population in this country have incomes less than $2,500, and a large number of single persons in this group have incomes less than $2,000. It is essential to the total program of voluntary prepaid medical care that MMS continue the availability of the $2,000 and $2,500 income limit contracts to single persons and families in this low income group.

The second question demands emphasis of two important facts: (1) Blue Shield was not intended to serve *only* the very low income groups. The plan in Michigan was devised for the benefit also of middle income groups, since studies had shown that it takes a very adequate income to enable a family to pay for major illness or accidents out of personal savings. (2) If an income of $2,500 in 1939 or 1940 was not considered to be high, then today's income of $5,000 can hardly be considered so, since its purchasing power, particularly with respect to medical care, is not greater than that of $2,500 in 1939.

These points are easily demonstrated by a comparative review of incomes and of U. S. Bureau of Labor statistics on cost of living.

The estimated average family income in 1939, when Blue Shield contract limits for Michigan were determined, was $2,267; for 1954 (the most recently tabulated year) average family income was $5,274. (Today's figure may be slightly higher than that, but not appreciably.) However, by February, 1956, the average cost of all items included in the Consumer Price Index (which measures changes in prices for a fixed list of living essentials) was almost twice the figure for 1939. The actual increase from 1939 to February, 1956, was 92.9 per cent. The increase in food costs to the consumer was 131 per cent; the increase in costs for housing was 58.6 percent; for apparel, 99.2 per cent; for transportation. 84.2 per cent; and for medical care, 80.3 per cent. In Detroit, which is one of the cities surveyed monthly, by February, 1956, the consumer price index had risen, from the 1935-39 base of 100, to 201.5.

The increase in income taxes, and the fact that we do not even consider the deduction of income taxes when we stipulate contract income limits, would further decrease the purchasing power of each dollar of income. In effect, then, a family that today has a gross income of $5,000 is even worse off financially than a comparable family that grossed $2,500 in 1939.

A realistic approach would suggest that, instead of eliminating full coverage for family subscribers with a $5,000 annual income and single subscribers with a $3,750 income, we should offer full coverage to even higher income groups.

There is no basis in fact for the protest that

(Continued on Page 729)

Michigan State Medical Society

The Ninety-first Annual Session



D. Bruce Wiley, M.D.
Utica
Council Chairman



W. S. Jones, M.D.
Menominee
President



J. E. Livesay, M.D.
Flint
Speaker



L. Fernald Foster, M.D.
Bay City
Secretary

OFFICIAL CALL

The Michigan State Medical Society will convene in Annual Session in Detroit, Michigan, September 24-25-26-27-28, 1956. The provisions of the Constitution and By-Laws and the Official Program will govern the deliberations.

W. S. Jones, M.D.
President

D. Bruce Wiley, M.D.
Council Chairman

J. E. Livesay, M.D.
Speaker

K. H. Johnson, M.D.
Vice Speaker

Attest:

L. Fernald Foster, M.D.
Secretary



K. H. Johnson, M.D.
Lansing
Vice Speaker

TWO-DAY SESSION OF HOUSE OF DELEGATES

September 24-25, 1956

The 1956 House of Delegates of the Michigan State Medical Society will hold a two-day session beginning Monday, September 24, at 10:00 a.m. The business of the House of Delegates will be transacted in the Grand Ballroom of the Sheraton-Cadillac Hotel, Detroit.

The House will meet also on Monday, September 24 at 2:00 p.m. and at 8:00 p.m. and on Tuesday, September 25, at 9:30 a.m. and at 8:00 p.m.

The intervals between meetings of the House of Delegates have been spaced to permit the Reference Committees ample time to transact all business referred to them.

SEATING OF DELEGATES

"Any Delegate-Elect not present to be seated at the hour of call of the first meeting may be replaced by the accredited Alternate next on the list as certified by the Secretary of the component County Society involved."—MSMS By-Laws, Chapter 8, Section 6.

OUTLINE OF 1956 ASSEMBLY AND SECTION SPEAKERS

91st Annual Session MSMS

Detroit, September 26-27-28, 1956

Time	Wednesday September 26, 1956	Thursday September 27, 1956	Friday September 28, 1956
A.M. 8:30- 9:00	Registration Exhibits Open	Registration Exhibits Open	Registration Exhibits Open
9:00- 9:30	*General Practice* Perry S. MacNeal, M.D. Philadelphia, Pa.	9:00-10:00 a.m. *Surgery Panel* Frederick A. Coller, M.D. Moderator, Ann Arbor, Mich. James H. Means, M.D. Boston, Mass. Dwight E. Clark, M.D. Chicago, Ill. E. Perry McCullagh, M.D. Cleveland, O.	*Obstetrics* James E. Fitzgerald, M.D. Chicago, Ill.
9:30-10:00	*Medicine* Francis R. Keating, Jr., M.D. Rochester, Minn.		*Pathology* Averill A. Liebow, M.D. New Haven, Conn.
10:00-11:00	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS
11:00-11:30	*Occupational Health (Medicine)* Seward E. Miller, M.D. Washington, D. C.	*Otolaryngology* G. Slaughter Fitz-Hugh, M.D. Charlottesville, Va.	*Dermatology* Herbert S. Rattner, M.D. Chicago, Ill.
11:30 a.m.- 12:00 Noon	*Urology (Surgery)* John K. Lattimer, M.D. New York, N. Y.	*Radiology* John R. Schenken, M.D. Omaha, Nebraska	*Dermatology* Edward P. Cawley, M.D. Charlottesville, Va.
P.M. 12:00- 1:00	DISCUSSION CONFERENCE	DISCUSSION CONFERENCE	DISCUSSION CONFERENCE
2:00- 2:30	*Pediatrics* John P. Caffey, M.D. New York, N. Y.	*Gastroenterology-Proctology* *(Beaumont Lecture)* Leon Schiff, M.D. Cincinnati, O.	*Nervous & Mental* Kenneth E. Appel, M.D. Ardmore, Pa.
2:30- 3:00	*Gynecology* Somers H. Sturgis, M.D. Boston, Mass.	*Ophthalmology* Theodore F. Schlaegel, Jr., M.D. Indianapolis, Ind.	*Anesthesiology* O. Sidney Orth, M.D. Madison, Wisc.
3:00- 4:00	INTERMISSION TO VIEW EXHIBITS	INTERMISSION TO VIEW EXHIBITS	3:00-3:30 FINAL INTERMISSION TO VIEW EXHIBITS
4:00- 4:30	*Obstetrics* Edwin J. DeCosta, M.D. Chicago, Ill.	*Pediatrics* Warren E. Wheeler, M.D. Columbus, O.	3:30-5:00 p.m. *Medicine Panel* Myron Prinzmetal, M.D. Beverly Hills, Calif. Charles A. Poindexter, M.D. New York, N. Y. Arthur C. Corcoran, M.D. Cleveland, O. George R. Meneely, M.D. Nashville, Tenn.
4:30- 5:00	*Public Health &* *Preventive Medicine* Otis Anderson, M.D. Washington, D. C.	*Nervous & Mental* M. Ralph Kaufman, M.D. New York, N. Y.	
5:00- 6:00	SIX SECTION MEETINGS	SIX SECTION MEETINGS	FOUR SECTION MEETINGS
	General Practice Perry S. MacNeal, M.D. Philadelphia, Pa.	*Gastroenterology-Proctology* Leon Schiff, M.D. Cincinnati, O.	*Anesthesiology* O. Sidney Orth, M.D. Madison, Wisc.
	Obstetrics-Gynecology Edwin J. DeCosta, M.D. Chicago, Ill.	*Nervous & Mental* M. Ralph Kaufman, M.D. New York, N. Y.	*Dermatology-Syphilology* Herbert S. Rattner, M.D. Chicago, Ill.
	Occupational Health Seward E. Miller, M.D. Washington, D. C.	*Ophthalmology* Theodore F. Schlaegel, Jr., M.D. Indianapolis, Ind.	*Medicine* Jack M. Kaufman, M.D. Detroit, Mich.
	Pediatrics John P. Caffey, M.D. New York, N. Y.	*Otolaryngology* G. Slaughter Fitz-Hugh, M.D. Charlottesville, Va.	*Pathology* Averill A. Liebow, M.D. New Haven, Conn.
	Public Health & *Preventive Medicine* Otis Anderson, M.D. Washington, D. C.	*Radiology* John R. Schenken, M.D. Omaha, Nebraska	
	Urology John K. Lattimer, M.D. New York, N. Y.	*Surgery* Dwight E. Clark, M.D. Chicago, Ill.	END OF ASSEMBLY
	8:30-10:30 p.m. Officers Night Biddle Lecture To be announced	10:00 p.m. to 1:00 a.m. State Society Night MSMS Entertainment	

Michigan State Medical Society

The Ninety-first Annual Session

SHERATON-CADILLAC HOTEL, DETROIT

SEPTEMBER 23-28, 1956

INFORMATION

- **DETROIT WILL BE HOST TO MSMS IN SEPTEMBER,** 1956.
- **MSMS HOUSE OF DELEGATES** convenes Monday, September 24, at 10:00 a.m., Grand Ballroom, Sheraton-Cadillac Hotel. It will hold three meetings on Monday and two meetings on Tuesday, September 25.
- **THE PROGRAM OF THE ASSEMBLY** for the 91st Annual Session of the Michigan State Medical Society lists guest speakers from all parts of the United States. They are the usual stars in the medical world who always grace the podium at annual conventions of the Michigan State Medical Society; they insure a valuable concentrated continuation course in all phases of medicine and surgery for the busy practitioners of Michigan, neighboring states and the Province of Ontario, on September 26-27-28.
- **REGISTRATION,** Tuesday afternoon through Friday afternoon, September 25-28, Fifth Floor, Sheraton-Cadillac Hotel. Advance registration—on Tuesday and early Wednesday morning—will save the doctors' time. Present your State Medical Society or Canadian Medical Association membership card to expedite registration.

 NO REGISTRATION FEE FOR STATE MEDICAL SOCIETY AND CMA MEMBERS.

 Doctors of Medicine, who are not members of their state medical society or of the Canadian Medical Association, will be accorded the privileges of the MSMS Annual Session upon payment of a $25.00 registration fee.
- **REGISTER AS SOON AS YOU ARRIVE. ADMISSION BY BADGE ONLY.**
- **ALL SUBJECTS** at the MSMS Annual Session are applicable to clinical medicine. They stress diagnosis and treatment, usable in everyday practice.
- **POSTGRADUATE CREDITS** given to every MSMS member who attends MSMS Annual Session.
- **SIX ASSEMBLIES** and one public meeting—16 Section Meetings—three Discussion Conferences, all on September 26-27-28.
- **A DISCUSSION CONFERENCE** — featuring the guest speakers of each day—will be held daily from 12:00 noon to 1:00 p.m. in the Grand Ballroom of the Sheraton-Cadillac Hotel. Audience participation invited.
- **SECTION MEETINGS** will follow the daily Assemblies at 5:00 to 6:00 p.m.
- **PAPERS WILL BEGIN AND END ON TIME.** This scientific meeting will feature by-the-clock promptness and regularity.
- **TECHNICAL EXHIBITS WILL** contain much of interest and value. Intermissions to view the exhibits have been arranged.
- **M. A. DARLING, M.D., DETROIT,** is Chairman of the Committee on Arrangements for the 1956 MSMS Annual Session.

THREE DISCUSSION CONFERENCES



H. C. Mack, M.D.
Detroit
Leader on Wednesday, September 26, 1956



F. A. Coller, M.D.
Ann Arbor
Leader on Thursday, September 27, 1956



Harold Henderson, M.D.
Detroit
Leader on Friday, September 28, 1956

Three quiz periods will be held Wednesday-Thursday-Friday, September 26-27-28, in the Grand Ballroom of the Sheraton-Cadillac Hotel, Detroit, 12:00 noon to 1:00 p.m., with all the guest speakers of the day on the platform.

An opportunity to ask questions concerning the presentations of the guest essayists, or to discuss an interesting case with them, is provided at these daily Discussion Conferences.

- **CABARET-STYLE DANCE AND ENTERTAINMENT,** with the compliments of the Michigan State Medical Society, will be held in the Grand Ballroom of the Sheraton-Cadillac Hotel on Thursday evening, September 27. All who register will receive a card of admission and they and their ladies are cordially invited to attend.
- **THE WOMAN'S AUXILIARY** to the Michigan State Medical Society will present an attractive social and business program at the Ft. Shelby Hotel, Detroit. The wife of every MSMS member is cordially invited to attend.
- **MEMBERS OF MICHIGAN MEDICAL SERVICE** will meet in annual session, Tuesday, September 25, at 2:00 p.m. This meeting will follow the annual MMS luncheon to be held at MMS headquarters, 441 E. Jefferson Ave., Detroit.

SCIENTIFIC ASSEMBLY

Wednesday-Thursday-Friday,

September 26-27-28, 1956

SAVE AN ORDER FOR THE EXHIBITOR AT THE MICHIGAN STATE MEDICAL SOCIETY ANNUAL SESSION

Michigan State Medical Society

The Ninety-first Annual Session

SHERATON-CADILLAC HOTEL, DETROIT, SEPTEMBER 24-25, 1956

HOUSE OF DELEGATES—ORDER OF BUSINESS*

MONDAY, SEPTEMBER 24

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

10:00 a.m.—First meeting

1. Call to Order by Speaker
2. Report of Committee on Credentials
3. Roll Call
4. Appointment of Reference Committees
 - (a) On Officers Reports
 - (b) On Reports of The Council
 - (c) On Reports of Standing Committees
 - (d) On Reports of Special Committees
 - (e) On Constitution and By-Laws
 - (f) On Resolutions
 - (g) On Special Memberships
 - (h) On Rules and Order of Business
 - (i) On Legislation and Public Relations
 - (j) On Hygiene and Public Health
 - (k) On Medical Service and Prepayment Insurance
 - (l) On Miscellaneous Business
 - (m) On Executive Session
 - (n) On Emergency Medical Service
5. Speaker's Address—J. E. Livesay, M.D., Flint
6. President's Address—W. S. Jones, M.D., Menominee
7. President-Elect's Address—Arch Walls, M.D., Detroit
8. Annual and Supplemental Reports of The Council—D. Bruce Wiley, M.D., Utica, Chairman of The Council
9. Report of Delegates to American Medical Association—W. A. Hyland, M.D., Grand Rapids, Chairman
10. Brief of Annual Report of Woman's Auxiliary—Mrs. Delbert MacGregor, Flint, President
11. Brief of Annual Report of Michigan State Medical Assistants Society—Miss Hallie Cummins, Caro, President
12. Selection of Michigan's Foremost Family Physician

MONDAY, SEPTEMBER 24

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

2:00 p.m.—Second Meeting

13. Supplemental Report of Committee on Credentials
14. Roll Call
15. Resolutions†
16. Reports of MSMS Standing Committees
 - A. Committee on Postgraduate Medical Education
 - B. Preventive Medicine Committee
 - (1) Committee on Rheumatic Fever Control
 - (2) Cancer Control Committee
 - (3) Maternal Health Committee (and Subcommittees)
 - (4) Venereal Disease Control Committee
 - (5) Tuberculosis Control Committee
 - (6) Industrial Health Committee
 - (7) Mental Health Committee
 - (8) Child Welfare Committee (and Subcommittees)
 - (9) Iodized Salt Committee
 - (10) Geriatrics Committee (and Subcommittees)
 - C. Public Relations Committee (and Subcommittees)
 - D. Ethics Committee
 - E. Legislative Committee
17. Reports of Special Committees
 - A. Beaumont Memorial Committee
 - B. Scientific Radio Committee
 - C. Advisory Committee to Woman's Auxiliary
 - D. Advisory Committee to Michigan State Medical Assistants Society
 - E. Committee to Study MSMS Financial Structure

 Reports of the Committees of The Council, including Committee on Scientific Work, are included in Annual Report of The Council.

MONDAY, SEPTEMBER 24

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

8:00 p.m.—Third Meeting

18. Supplementary Report of Committee on Credentials
19. Roll Call
20. Unfinished Business
21. New Business
22. Reports of Reference Committees
 - (a) On Officers' Reports
 - (b) On Reports of The Council
 - (c) On Reports of Standing Committees
 - (d) On Reports of Special Committees
 - (e) On Constitution and By-Laws
 - (f) On Resolutions
 - (g) On Special Memberships
 - (h) On Rules and Order of Business
 - (i) On Legislation and Public Relations
 - (j) On Hygiene and Public Health
 - (k) On Medical Service and Prepayment Insurance
 - (l) On Miscellaneous Business
 - (m) On Executive Session
 - (n) On Emergency Medical Service

*See the Constitution, Articles IV, VII and XII, and the By-Laws, Chapter 8 on "House of Delegates."

†All resolutions, special reports, and new business shall be presented in writing in triplicate (By-Laws, Chapter 8, Section 10-m).

TUESDAY, SEPTEMBER 25

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

9:30 a.m.—Fourth Meeting

23. Supplementary Report of Committee on Credentials
24. Roll Call
25. Unfinished Business
26. New Business
27. Supplementary Reports of Reference Committees

TUESDAY, SEPTEMBER 25

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

8:00 p.m.—Fifth Meeting

28. Supplementary Report of Committee on Credentials
29. Roll Call
30. Unfinished Business
31. Supplemental Report of The Council
32. Supplementary Reports of Reference Committees
33. Elections
 - (a) Councilors:
 1st District—A. E. Schiller, M.D., Detroit—Incumbent
 4th District—Ralph W. Shook, M.D., Kalamazoo—Incumbent
 5th District—J. D. Miller, M.D., Grand Rapids—Incumbent
 6th District—H. H. Hiscock, M.D., Flint—Incumbent
 - (b) Delegates to American Medical Association:
 W. D. Barrett, M.D., Detroit—Incumbent
 W. H. Huron, M.D., Iron Mountain—Incumbent
 R. L. Novy, M.D., Detroit—Incumbent
 - (c) Alternate Delegates to American Medical Association
 G. W. Slagle, M.D., Battle Creek—Incumbent
 William Bromme, M.D., Detroit—Incumbent
 J. R. Rodger, M.D., Bellaire—Incumbent
 - (d) President-Elect
 - (e) Speaker of the House of Delegates
 - (f) Vice-Speaker of the House of Delegates
34. Adjournment.

REGISTRATION OF DELEGATES

Monday, September 24, 1956
8:30 a.m.

Grand Ballroom Foyer (4th Floor)

ANNUAL SESSION APPOINTMENTS

- *Chairman of Arrangements*
 M. A. Darling, M.D., Detroit
- *House of Delegates Press Relations Committee*
 J. E. Livesay, M.D., Flint, *Chairman*
 H. F. Dibble, M.D., Detroit
 L. Fernald Foster, M.D., Bay City
 A. B. Gwinn, M.D., Hastings
 K. H. Johnson, M.D., Lansing
- *Scientific Press Relations Committee*
 L. J. Bailey, M.D., Detroit
 H. F. Dibble, M.D., Detroit
 A. B. Gwinn, M.D., Hastings
 J. J. Lightbody, M.D., Detroit
 M. R. Weed, M.D., Detroit

HOTEL RESERVATIONS

MICHIGAN STATE MEDICAL SOCIETY

91st Annual Session

Detroit, September 26-27-28, 1956

The reservation blank below is for your convenience in making your hotel reservations in Detroit. Please send your application to the Committee on Hotels for MSMS Convention, Att: B. Van DeKeere, Sheraton-Cadillac Hotel, Detroit, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant, when convenient.

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Committee on Hotels,
Michigan State Medical Society
c/o Sheraton-Cadillac Hotel
Detroit, Michigan Att: D. J. Gibb

Please make hotel reservation(s) as indicated below:

_____ Single Room(s) _____ persons

_____ Double Room(s) for _____ persons

_____ Twin-Bedded Room(s) for _____ persons

Arriving September _____ hour _____ A.M. _____ P.M.

Leaving _____ hour _____ A.M. _____ P.M.

Hotel of First Choice: _____

Second Choice: _____

Name and addresses of all applicants including person making reservation:

Name	Address	City	State

Date _____ Signature _____

Address _____ City _____

MSMS HOUSE OF DELEGATES, 1956

Delegates and Alternates

(Names of Alternates appear in italics)

OFFICERS

J. E. Livesay, M.D., 621 Mott Foundation Bldg., Flint, *Speaker*

K. H. Johnson, M.D., 1116 Mich. Natl. Tower, Lansing, *Vice Speaker*

L. Fernald Foster, M.D., 919 Washington, Bay City, *Secretary*

R. H. Baker, M.D., 1110 Pontiac Bank Bldg., Pontiac, *Immediate Past-President*

ALLEGAN

L. F. Brown, M.D., 133 E. Allegan, Otsego
E. B. Johnson, M.D., 412 Water St., Allegan

ALPENA-ALCONA-PRESQUE ISLE

E. S. Parmenter, M.D., P.O. Box 192, Alpena
J. E. Spens, M.D., Professional Bldg., Alpena

BARRY

A. B. Gwinn, M.D., City Bank Bldg., Hastings
D. H. Castleman, M.D., 146 E. State St., Hastings

BAY-ARENAC-IOSCO

O. J. Johnson, M.D., 207 N. Walnut St., Bay City
D. A. Bowman, M.D., 1705 Third St., Bay City
W. G. Gamble, Jr., M.D. 2010 Fifth Avenue, Bay City
S. A. Cosens, M.D., 101 West John Street, Bay City

BERRIEN

D. W. Thorup, M.D., 610 Fidelity Bldg., Benton Harbor
N. J. Hershey, M.D., 122 Grant St., Niles
H. J. Klos, M.D., 2121 Niles, St. Joseph
E. L. Garrett, M.D., 61 N. St. Joseph Ave., Niles

BRANCH

H. J. Meier, M.D., 87 W. Pearl St., Coldwater
R. J. Fraser, 22 W. Pearl St., Coldwater

CALHOUN

H. C. Hansen, M.D., 417 Post Bldg., Battle Creek
L. R. Keagle, M.D., 196 North Ave., Battle Creek
J. W. Hubly, M.D., 1407 Security Tower, Battle Creek
S. B. Winslow, M.D., 1509 Security Bank Bldg., Battle Creek

CASS

S. L. Loupee, M.D., 110 W. Division, Dowagiac
U. M. Adams, M.D., Marcellus

CHIPPEWA-MACKINAC

W. F. Mertaugh, M.D., Central Savings Bank Bldg., Sault Ste. Marie
E. S. Rhind, M.D., 300 Court St., Sault Ste. Marie

CLINTON

F. W. Smith, M.D., St. Johns
A. C. Henthorn, M.D., Route 3, St. Johns

DELTA-SCHOOLCRAFT

H. Q. Groos, M.D., 1015 S. First St., Escanaba
C. E. Kee, M.D., 8 South 11th St., Gladstone

DICKINSON-IRON

D. R. Smith, M.D., 105 E. "A" Street, Iron Mountain
E. R. Addison, M.D., 412 Superior St., Crystal Falls

EATON

P. H. Engle, M.D., 121 South Main St., Olivet
B. P. Brown, M.D., 116 Pearl Street, Charlotte

GENESEE

C. W. Colwell, M.D., 706 Citizens Bank Bldg., Flint
R. M. Bradley, M.D., 420 Genesee Bank Bldg., Flint
C. K. Stroup, M.D., 2002 East Court St., Flint
J. E. Livesay, M.D., 621 Mott Foundation Bldg., Flint
F. D. Johnson, M.D., 312 Paterson Bldg., Flint
L. G. Bateman, M.D., 1928 Lewis, Flint
G. E. Anthony, M.D., 1015 Detroit St., Flint
J. C. Benson, Jr., M.D., 402 W. Second St., Flint
F. W. Baske, M.D., 923 Maxine St., Flint
J. E. Wentworth, M.D., 1651 Chevrolet Ave., Flint

GOGEBIC

D. C. Eisele, M.D., 109 E. Aurora, Ironwood
D. L. Davidson, M.D., 200 S. Sophie, Bessemer

GRAND-TRAVERSE-LEELANAU-BENZIE

D. G. Pike, M.D., 876 E. Front St., Traverse City
B. J. Sweeney, M.D., 227½ Grandview Pkwy., Traverse City

GRATIOT-ISABELLA-CLARE

E. S. Oldham, M.D., Breckenridge
J. M. Wood, M.D., 314 S. Brown St., Mt. Pleasant

HILLSDALE

A. W. Strom, M.D., 32 South Broad St., Hillsdale
L. W. Day, M.D., 112 E. Chicago, Jonesville

HOUGHTON-BARAGA-KEWEENAW

P. S. Sloan, M.D., 214 Clark Street, Houghton
L. C. Aldrich, M.D., 1609 E. Houghton Ave., Houghton

HURON

C. W. Oakes, M.D., Harbor Beach
C. A. Scheurer, M.D., Pigeon

INGHAM

J. M. Wellman, M.D., 301 Seymour, Lansing
H. W. Harris, M.D., 609 N. Washington, Lansing
F. L. Troost, M.D., 4341 W. Delhi, Holt
K. H. Johnson, M.D., 1116 Michigan National Tower, Lansing
L. A. Drolett, M.D., 3526 West Saginaw St., Lansing
K. W. Toothaker, M.D., 930 N. Washington, Lansing
R. E. Kalmbach, M.D., 301 Seymour St., Lansing
Milton Shaw, M.D., 320 Townsend, Lansing

IONIA-MONTCALM

Robert E. Rice, M.D., Greenville
Milton Slagh, M.D., Saranac

JACKSON

W. A. Wickham, M.D., 420 W. Michigan, Jackson
H. W. Porter, M.D., 505 Wildwood Ave., Jackson
C. R. Lenz, M.D., 405 First St., Jackson
J. P. Bentley, M.D., 404 McNeal St., Jackson

KALAMAZOO

W. A. Scott, M.D., 252 E. Lovell, Kalamazoo
S. E. Andrews, M.D., 224 E. Cedar St., Kalamazoo
F. C. Ryan, M.D., 507 S. Burdick St., Kalamazoo
P. F. Cooper, M.D., 252 E. Lovell, Kalamazoo
R. R. Dew, M.D., 252 E. Lovell, Kalamazoo
J. G. Malone, M.D., 420 John St., Kalamazoo

KENT
K. E. Fellows, M.D., 110-116 E. Fulton, Grand Rapids
W. J. Fuller, M.D., 833 Lake Dr. S.E., Grand Rapids
R. A. Rasmussen, M.D., 1810 Wealthy St. S.E., Grand Rapids
A. V. Wenger, M.D., 124 E. Fulton St., Grand Rapids
W. C. Beets, M.D., 124 E. Fulton St., Grand Rapids
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G. W. DeBoer, M.D., 26 Sheldon Ave. S.E., Grand Rapids
F. S. Alfenito, M.D., 26 Sheldon Ave. S.E., Grand Rapids
F. M. Burroughs, Jr., M.D., 11 S. Wilson, Grandville
C. E. Farber, M.D., 68 Ransom Ave. N.E., Grand Rapids
Jack Hoogerhyde, M.D., 124 E. Fulton St., Grand Rapids
R. C. Boelkins, M.D., 125-127 Fountain N.E., Grand Rapids
V. A. Notier, M.D., 26 Sheldon Ave. S.E., Grand Rapids
B. R. Van Zwalenburg, M.D., 833 Lake Drive S.E., Grand Rapids

LAPEER
D. J. O'Brien, M.D., Nepessing St., Lapeer
G. L. Smith, M.D., 1113 E. Third St., Imlay City

LENAWEE
G. C. Wilson, M.D., 108 N. Jackson St., Clinton
W. H. Hewes, M.D., 146 E. Maumee St., Adrian

LIVINGSTON
H. C. Hill, M.D., 116 N. Michigan, Howell
L. E. May, M.D., 203 N. Court St., Howell

LUCE
D. C. Adams, M.D., Newberry State Hospital, Newberry

MACOMB
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MANISTEE
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MENOMINEE
J. R. Heidenreich, M.D., Daggett
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VAN BUREN

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F. J. Loomis, M.D., Paw Paw

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R. L. Novy, M.D., 858 Fisher Bldg., Detroit 2
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M. A. Darling, M.D., 673 Fisher Bldg., Detroit 2
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C. L. Candler, M.D., 20040 Mack Ave., Grosse Pte. Woods
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A. E. Price, M.D., 313 David Whitney Bldg., Detroit 26
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G. L. Coan, M.D., 2336 Van Alstyne Blvd., Wyandotte
R. P. Lytle, M.D., 10 Peterboro, Detroit 1
C. D. Moll, M.D., 10 Peterboro, Detroit 1
E. R. Sherrin, M.D., 17555 James Couzens Hwy., Detroit
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WEXFORD-MISSAUKEE

R. V. Daugharty, M.D., 502 E. Chapin, Cadillac
M. R. Murphy, M.D., 120 E. Cass, Cadillac

HOUSE OF DELEGATES—1956
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(All meetings of Reference Committees will be held in the Sheraton-Cadillac Hotel, Detroit)

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Hallie Cummins, R.R.L.

President, Michigan State Medical Assistants Society

Meet Miss Hallie Cummins, R.R.L., of Caro, President of the Michigan State Medical Assistants Society.

The R.R.L. stands for "Registered Record Librarian" and, for Hallie, it stands for the realization of an aim she has had since she first became associated with the medical profession.



Since 1947, she has served as secretary to the Superintendent of Caro State Hospital. Starting there in 1937 as a medical secretary, Hallie later spent about five years as supervisor of the medical record and stenographic department before being promoted to her present position, which for a time combined personnel work with other duties.

It was in 1951 that her dreams of acquiring professional status were formulated, when she joined the State Association and the American Association of Medical Record Librarians. In 1954, Hallie successfully wrote the national registry examination and received the coveted title of R.R.L. Inasmuch as this examination is based on general hospital methods, and state hospitals do not keep medical records the same as general hospitals do, extra effort and additional training became necessary. Hallie attended summer school at the College of St. Scholastica in Duluth, Minnesota, in 1953, then took a three months' leave of absence during 1954 to work and study at Duluth's St. Mary's Hospital.

If 1951 was a good year for Hallie's personal goals, it was also a good year for the Saginaw County and the Michigan State Medical Assistants Society; for it was then that she joined the ranks of MSMAS. Starting as a board member of the Saginaw County Chapter, she became President for 1953-54. In the state organization, she began as chairman of the Nominating Committee in 1952-53. A year later she became Corresponding Secretary, then President-elect.

Last November, Hallie was one who represented MSMAS at the organizational meeting for the American Association of Medical Assistants in Kansas City, Kansas. She has been asked to act as historian of this group, and she takes great pride in Michigan's contribution to this budding national association.

In her native Caro, Hallie is a charter member of the Business and Professional Women's Association.

She was born in Caro and attended school there. Her hopes of becoming a physical education instructor were cut short by the death of her father while she was in high school. Although Hallie never taught school, she was graduated from Tuscola County Normal (a school for rural teachers) and completed an extension course in teaching. After studying a secretarial course at business college, she worked at various clerical jobs. She started her career with the State in 1930 at Lapeer Home and Training School.

Hallie lives with her mother and two sisters at the family home. Her interests are many. Although she doesn't have much time for it now, she is an ardent sportswoman. She loves to play at tennis, golf and bowling. Hallie served several years as team captain and president of the Caro Hospital bowling league, but modestly claims she's just an average bowler ("a southpaw is not usually a winner").

She loves to knit, travel and garden, her favorite crops being roses, chrysanthemums and—of all

things—corn! Hallie has become a photography enthusiast and, sandwiched in among many hours of letter writing, planning and committee meetings, she is taking an evening course in photography in the local adult education program.

With so many accomplishments, one would expect a paragon of efficiency.

Well, Hallie is efficient, but it isn't the hustle-bustle variety. It's a calm, orderly kind that one isn't aware of, until all of a sudden the realization comes that things are done. It is said that the test of a good leader is to delegate *and relegate* authority. Hallie goes a step further; she relinquishes the limelight, too. Her modesty stems from introspection, because "one can't live with two sisters without being well aware of one's faults."

Perhaps this is why Hallie is able to give and take counsel with equal grace.

One of her nicest talents is her ability to make and keep friends. . . And one of her most precious possessions is her ready tact, the kind that could only come from an inborn consideration for others.

A distinguished lady is the MSMAS President, with her silvery-blond hair, fresh pink complexion and generous, friendly smile. Michigan's medical assistants are fortunate to have Hallie Cummins as their leader, and thankful for her many talents.

—Doris E. Jarrad

MICHIGAN MEDICAL SERVICE

(Continued from Page 718)

Blue Shield should not be sold to persons with $10,000, $20,000 or even higher incomes, or that families with $5,000 income should not be sold a $2,500 income limit contract. Neither the fact that a patient has Blue Shield nor the type of contract he carries hamstrings the physician in any way, since he then bills the patient for the difference between the Blue Shield fee and the amount he would usually charge a patient in that income bracket. *The important point is that the participating physician agrees to accept the Blue Shield fee as payment in full for a particular service only when the patient-subscriber's family income has not averaged more than the income limit specified in his contract.* The choice of a $2,000-$2,500 or a $3,750-$5,000 income limit contract, one must remember, is optional with the subscriber, no matter what his income is.

The problems of distribution and cost of medical care are as much the doctor's business as medical care itself, and as much his business today as we considered them to be when Michigan Medical Service was founded. No one asks that he become an economic expert, but it is within the realm of reason that he be expected to maintain more than minimal awareness of changing economic conditions. Without sufficient awareness, crucial medico-economic problems will remain enigmas to him and will harass practice and hamper progress.

MEDICINE IN A DEMOCRACY

The democracy of America has produced the best doctor-care the world has ever known. And Blue Shield has made that doctor-care available to all self-reliant citizens in an American way of nonprofit insurance.

An alien system of "compulsory" insurance with its burden of political job holders is not needed in a nation where more than half the citizens have provided themselves with insured protection against the costs of unexpected need for doctor-care.

In this American way each citizen has the right to the physician of his choice—free choice of doctor it is called. Along with this principle is a plan of "allowances" to compensate the doctor according to the service which he renders. This schedule has been developed by members of the profession, and it corresponds with fees commonly charged for like service to patients of like standard of living. In most localities the majority of physicians accept these "allowances" as full payment from patients having an annual income within the lower brackets.

No patient in America goes without needed care by a doctor because he lacks funds with which to pay for the service. This is a traditional obligation which all good doctors honor. There is a growing social consciousness which has led many communities to accept the financial costs of care of the poor as a community obligation.—F. E. E. in *New York State Journal of Medicine,* March 1, 1956.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

X-RAY SCREENING PLANNED FOR SAGINAW VALLEY MIGRANTS

An intensive program of x-ray screening of migrant laborers in the Saginaw Valley area will get under way late in June and continue through the first two weeks in July. Tests will be made available to some 3,000 Spanish speaking workers.

This year assistance is being given by the Catholic Diocese of Saginaw and by industry and crops people of the area. The screening will take place in the counties of Saginaw, Huron, Tuscola, and Sanilac.

Because of the very active interest being shown by all groups concerned, it is expected that the program will afford a much more adequate survey of tuberculosis among migrant laborers than has been possible in the area in the past.

CERVICAL CARCINOMA SCREENING IN ST. JOSEPH COUNTY

A cervical carcinoma screening project in St. Joseph County began on May 1. The project is jointly sponsored by the county medical society, the local cancer society, the local health department, and the Michigan Department of Health. Following an intensive publicity campaign, women are urged to see their family physician for a cancer screening test. The patient pays the physician's regular examination fee and physical inspection is done for the purpose of detecting the possible presence of oral cancer, cancer of the breast and skin cancer. A pelvic examination is also made and a Papanicolaou test is done by a pathologist. The cost of the examination of the Papanicolaou smear is paid by the Michigan Department of Health. When biopsies are done, the cost is paid either by the patient or by the local cancer society. Following reports by the physician to the local health department, a statistical evaluation is made by the Michigan Department of Health.

This is a follow-up to a previous Papanicolaou screening survey made in St. Joseph County in December, 1954. The physicians make a specific effort to explain to the patients the object of the screening, the advantages and limitations, so that they are not given a false sense of security.

ABOUT LAST YEAR'S POLIO

Review of Michigan's poliomyelitis record in 1955 shows some interesting facts.

A total of 1,177 cases of polio were reported in the state in 1955. Of this number, 383 (32 per cent) were reported as paralytic and 794 (68 per cent) as non-paralytic. In previous years, the number of paralytic cases has just about equalled the number reported as non-paralytic.

The year 1955 had the distinction of being the first year since 1951 that polio cases have been under 2,000. In 1951, there were 1,463 cases reported. The highest year still is 1952, when 3,912 cases were reported.

An earlier peak incidence characterized 1955. The high week in that year was the thirty-second week, which was the second week in August. Usually, the peak week in Michigan is the last week in August or the first week in September.

The year 1955 also, of course, was signalized by being the first year of extensive use of vaccine. Analysis of data indicates that the vaccine afforded about 80 per cent protection against paralytic polio which is in the range of the 1954 field trial results.

The most marked drop in paralytic polio was among seven-year-olds, who had more nearly complete coverage in the immunization clinics in the spring of 1955. The clinics were set up for children in grades one and two.

The highest incidence of polio was at age six with a total of seventy-eight cases reported. Of these cases, twenty-five were paralytic and fifty-three non-paralytic.

VACCINE NOT AVAILABLE FOR THIRD DOSES

In accordance with the recent recommendation by the Public Health Service that poliomyelitis vaccine currently available be used only to give first and second doses, Rule 8 of the Rules and Administrative Policies Governing the Distribution and Use of Poliomyelitis Vaccine, as originally directed by Act 231, P.A. 1955, has been amended to read as follows:

Rule 8. Vaccine will be used only to give first and second doses to persons within the designated priority age groups. The person's age at the time of the first injection shall be the deciding factor.

The rule, as amended, was signed by the Governor and given immediate effect, April 12, 1956. Under this new wording, poliomyelitis vaccine cannot be released for third doses, nor can any vaccine already released be used for third doses.

Rule 10. Priority groups presently eligible for vaccine are the one through fourteen-year-old children and pregnant women.

GERMAN MEASLES HIGH IN STATE

Michigan is experiencing a major epidemic of German measles. From January 1 to April 30, reported cases reached 4,232 highest first four-month-total for the past ten years. For the same interval last year, 592 cases were reported and the total for the entire year 1955 was 1,318.

Concern in the present epidemic is centered upon what it may mean in number of congenital abnormalities among next year's births.

IMPORTANT RESEARCH CONTRIBUTION

Searle Introduces:

A Practical New Steroid for Protein Anabolism

Nilevar*

(BRAND OF NORETHANDROLONE)

PROTEOGENIC EFFECTIVENESS • The newest Searle Research development, Nilevar, exerts a potent force in protein anabolism. Yet it is without appreciable androgenic effect (approximately one-sixteenth of that exerted by the androgens).

Investigations with Nilevar show that nitrogen, potassium and phosphorus are retained in ratios indicating protein anabolism. Nilevar is thus the first steroid which is primarily anabolic and which provides a practical means of meeting the numerous demands for protein synthesis.

NILEVAR IS ORALLY EFFECTIVE • Clinical response to Nilevar is characterized not only by protein anabolism but also by an increase in appetite and an improved sense of well-being.

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MICHIGAN AUTHORS

Manuel Rodriguez-Gomez, M.D., Antonio Valdes-Rodriguez, M.D., and **Arthur L. Drew, M.D.,** Ann Arbor, are the authors of an article entitled "Effect of Zoxazolamine (Flexin) in Treatment of Spasticity," published in *The Journal of the American Medical Association,* March 3, 1956.

Martin J. Urist, M.D., South Haven, is the author of an article entitled "Esotropia With Bilateral Depression in Adduction," published in the American Medical Association Archives of Ophthalmology, April, 1956.

Raymond W. Waggoner, M.D., and **Ralph D. Rabinovitch, M.D.,** Ann Arbor, are the authors of an article presented at the dedication of the new Children's Psychiatric Unit of the University of Michigan Medical Center, Ann Arbor, February 11, 1956, which was published in the *University of Michigan Medical Bulletin,* March, 1956. The title is "The University of Michigan Plan for the Residential Treatment of Disturbed Children."

John B. Stetson, M.D., Ann Arbor, is the author of an article entitled "The Use of Lidocaine (Xylocaine Viscous 2 Per Cent) for Surface Analgesia," published in the *American Practitioner and Digest of Treatment,* April, 1956.

J. S. DeTar, M.D., Milan, is the author of an editorial, entitled "Renaissance of the Generalist," published in *Current Medical Digest,* March, 1956.

Robert H. Puite, M.D., and **Henry Tesluk, M.D.,** Detroit, are the authors of an article entitled "Whipple's Disease," published in the *American Journal of Medicine,* and condensed in the *American Practitioner and Digest of Treatment,* March, 1956.

D. W. McLean, M.D., L. W. Hull, M.D., and **T. C. Arminski, M.D.,** Detroit, are the authors of an article entitled "The Formation of a Functional Artificial Bladder in the Human Male," published in AMA *Archives of Surgery,* March, 1956.

Josef R. Smith, M.D., and **S. W. Hoobler, M.D.,** Ann Arbor, are the authors of an article, entitled "Clinical Evaluation of Chlorisondamine in the Prolonged Treatment of Hypertension," published in the *University of Michigan Medical Bulletin,* February, 1956.

Gerard Seltzer, M.D., Ann Arbor, is the author of an article, entitled "Kidney Biopsy: Technique and Purpose," published in the *University of Michigan Medical Bulletin,* February, 1956.

Halvor N. Christensen, Ph.D., Ann Arbor, is the author of an article entitled "Some Aspects of Parenteral Amino Acid Nutrition," published in the *University of Michigan Medical Bulletin,* February, 1956.

Reuben L. Kahn, D.Sc., Irving M. Blatt, M.D., and **Sun Hyoo Kim, D.V.M.,** are the authors of an article entitled "Studies on Tissue Reactions in Immunity," published in the University of Michigan Medical Bulletin, February, 1956.

Clifford J. Barborka, M.D., E. Clinton Texter, Jr., M.D., R. Burns Lewis, M.D., Walter W. Carroll, M.D., Chicago, and **Robert J. Bolt, M.D.,** Ann Arbor, are the authors of an article, entitled "Panel Discussion on Peptic Ulcer," published in *The American Journal of Gastroenterology,* March, 1956.

A. Ray Hufford, M.D., Grand Rapids, is the author of an article, entitled "The Gastroscopist's Adaptation to Esophagoscopy," read before the meeting of the American Gastroscopic Society, Atlantic City, June, 1955, and published in the *American Journal of Gastroenterology,* March, 1956.

W. A. Gilpin, M.D., Detroit, is the author of an article, entitled "Treatment of Rheumatoid Arthritis and Osteoarthritis with Succinate-Salicylate," published in THE JOURNAL of the Michigan State Medical Society, December, 1955, a condensation of which appears in *The Journal of the American Medical Association,* April 7, 1956.

John M. Witney, M.D., Battle Creek, is the author of an article, entitled "National Medical Civil Defense Planning and Requirements," published in *The Journal of the American Medical Association,* April 7, 1956.

John Woodworth Henderson, M.D., Ann Arbor, is the author of several sections of a "Symposium: Diseases of the Optic Nerve," published in the *Transactions of the American Academy of Ophthalmology and Otolaryngology,* January-February, 1956. The titles of his sections are (1) Anatomy and Physiology; Symptoms and Signs, (2) Spread of Inflammation from Adjacent Structures, (3) Disease Secondary to Systemic Infection, (4) Generalized Noninfectious Diseases.

John W. Ditzler, M.D., Detroit, is the author of an article, entitled "Induced Hypotension," published in the *Henry Ford Hospital Medical Bulletin,* March, 1956.

James Barron, M.D., Detroit, is the author of an article, entitled "Preparation of Natural Foods For Tube Feeding," published in the *Henry Ford Hospital Medical Bulletin,* March, 1956.

Charles Long II, M.D., Detroit, is the author of an article, entitled "Myofascial Pain Syndromes—Part II," published in the *Henry Ford Hospital Medical Bulletin,* March, 1956.

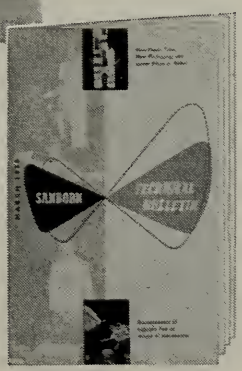
Leo J. Kenny, M.D., and **Carlos Mota, M.D.,** Detroit, are the authors of an article, entitled "Scalene Lymph Node Biopsy," published in the *Henry Ford Hospital Medical Bulletin,* March, 1956.

(Continued on Page 734)



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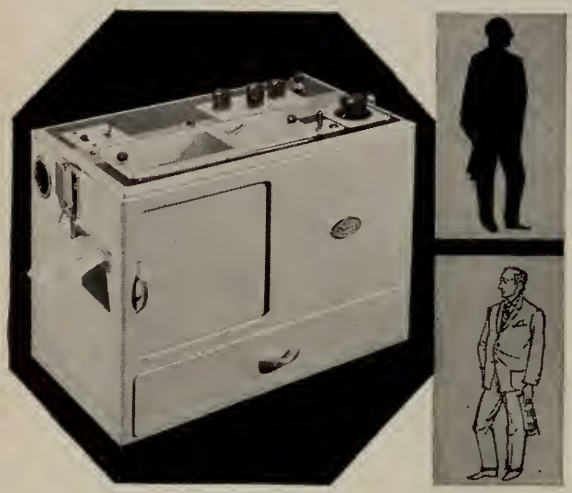
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*Queries and Minor Notes: J.A.M.A. *151*:13 (March 28) 1953.

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(Continued from page 732)

Lewis Cohen, M.D., presented a paper entitled "Digital Plethysmography—Its Diagnostic Value in the Rehabilitation of Patients Having Peripheral Arterial Disease" on April 7, 1956, at the Regional meeting of the American Federation of Clinical Research held at Eloise and at the staff meeting of Alexander Blain Hospital, Detroit, on February 2, 1956.

* * *

The Michigan Pathological Society has announced the establishment of the Carl V. Weller Lectureship in recognition of the enormous contributions made by Doctor Weller in the fields of pathology and clinical pathology. The first lecturer will be Howard T. Karsner, M.D., medical advisor to the Navy, Washington, D. C., and will be presented in Ann Arbor, December 8, 1956.

* * *

More than 100 ophthalmologists from the midwest and central Canada attended the Ophthalmology Conference held at The University Hospital, Ann Arbor, April 23-25. One of the most important conferences of its kind in the United States, it is conducted annually by the University's Department of Postgraduate Medicine.

Guest lecturers at the meeting included Dr. John S. McCavic, professor of clinical ophthalmology at the University of Pennsylvania Graduate School of Medicine and chief pathologist at Philadelphia's Wills Eye Hospital; Dr. Irving H. Leopold, chairman of the University of Pennsylvania Graduate Medical School ophthalmology department, Dr. H. L. Ormsby of the University of Toronto Medical School, and Dr. Albert M. Lemoyne, chairman of the University of Kansas ophthalmology department.

The conference was under the direction of Dr. F. Bruce Fralick, chairman of the University's Ophthalmology Department.

* * *

Dr. Francis C. Wood, Professor at University of Pennsylvania medical school, told doctors at the American Academy of General Practice that methods of paying for medical care are going to change, and doctors "can't block it." He said, "Decision as to what is going to be done will be made by the public." He proposed that doctors stop opposing new medical payment plans and concentrate on preserving "private enterprise in the practice of medicine" and on opposing national political control. Because medical care costs are rising, Dr. Wood proposed that the medical profession take the position that "the public deserves to have insurance against catastrophic illness. . . . The public deserves defense against a doctor who charges exorbitant fees.—*United Press.*

* * *

The World Medical Association's Tenth General Assembly will be held in Havana, Cuba, on October 10, 1956—the first Assembly of WMA to be held in Latin America. For program and information, write L. H. Bauer, M.D., Secretary General, 345 East 46th Street, New York 17.

(Continued on Page 736)

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1. Seifter, J., et al.: To be published. 2. Fazekas, J.F., et al.: M. Ann. District of Columbia **25**:67 (Feb.) 1956. 3. Mitchell, E.H.: J.A.M.A. In press.

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(Continued from page 734)

The American Medical Association will again cooperate with Ciba Pharmaceutical Products, Inc., next fall in a series of half-hour television programs. Arrangements have been completed for presentation of the popular "Medical Horizons" feature at 4:30 P.M., E.D.T., each Sunday over the American Broadcasting Company network, beginning Sunday, September 9, 1956.

"Medical Horizons" will originate live from hospitals, medical schools and research institutions throughout the country.

The new series will be seen on eighty-five stations, as compared with forty-two stations which carried last year's programs. Don Goddard, veteran newscaster, will return as narrator.

* * *

Fluoridation of the public drinking water is the most effective method of avoiding dental caries in children, said Philip Jay, D.D.S., speaking at a Public Health Conference in Ann Arbor, May 1, 1956, and reporting from a dental caries research in the Dental Department.

"It is not quite correct to call our water 'artificially' fluoridated," he stated, "because practically all water in Michigan has fluoride in it. Fluoridation is the process employed to bring the amount of natural fluoride in the water to its most effective level—one part per million."

For those opponents of fluoridation who claim that the Grand Rapids study has produced no evidence of the

(Continued on Page 738)

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*Moyer, J. H., and Hughes, W. M.:
J. Chron. Dis. 2:678, 1955.

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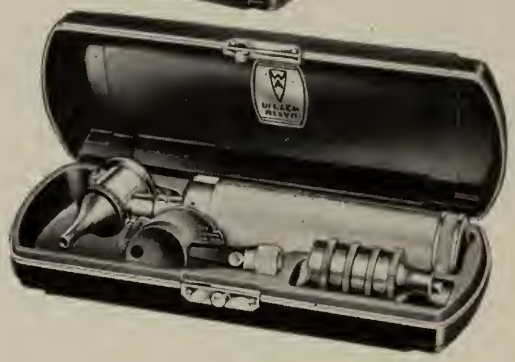
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(Continued from page 736)

dental benefits of fluoride, Dr. Jay pointed out that children born in that city since 1945, when fluoridation was introduced, have an average of 60 to 70 per cent less dental caries than children in surrounding communities which have no fluoride in their water. Grand Rapids children born in 1950 have 83 per cent less caries, and children who were six years old when the study began have 26 per cent less caries.

The most effective age range for fluoride to be beneficial is one through ten.

Fluoride has little, if any, effect on dental caries incidence in adults. "It has absolutely no harmful effects on adults, either," stated Dr. Jay. "The fluoride added to water supplies to bring the level up to one part per million is no different in composition than that naturally in the water which people have been drinking for years in many communities, without even being aware of it."

* * *

The World Medical Association will hold the opening plenary session of its tenth General Assembly in Havana, Cuba, on October 10, 1956, which is Cuban Independence Day. This is the first time that an Assembly has been held in Latin America. The only other meeting held in the Western Hemisphere was the 1950 Assembly in New York City.

The 1956 Assembly will begin with a day of registration on October 9, and sessions will continue through October 14. October 15 will be devoted to an excursion to Veradero Beach.

On October 8 and 9, the Latin American doctors will meet jointly with representatives of the World Medical Association and the International Hospital Association to consider ways and means of improving the hospital standards in Latin America.

The morning session of the Assembly on October 11 will be devoted to consideration of problems of medical publications in Latin America, and the scientific session will be devoted to two main subjects—cardiology and nutrition.

* * *

The Navy is reported to be asking the Defense Department for approval to requisition Selective Service for 200 physicians, its first medical draft call since shortly after the end of fighting in Korea. The medical profession had hoped to have the special doctors' draft abolished, except during actual war conditions. No other large group of citizens has a special draft, and extending far into adult life.

* * *

The Radiologist is a new medical magazine published by the American College of Radiology. The first number is twelve pages, with a heavy paper cover, beautifully printed and profusely illustrated, in two colors. It promises to keep its members informed of their specialty and its place in the whole field of medicine, including medical ethics and economics as related to radiology. It is intended to be available for the reception rooms in hospitals and private offices. It is indeed attractive.

(Continued on page 740)

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(Continued from page 738)

* * *

The Detroiter, a weekly publication of the Detroit Board of Commerce, published on the front page of the April 16 issue an article by Milton A. Darling, M.D., President of the Wayne County Medical Society. A picture of the projected new building, on Wayne University Medical Campus, to house the Wayne County Medical Society, was included. A fund-raising campaign is in progress.

* * *

Draft deferment has been granted 900 young physicians, enabling them to begin—or, in some cases, to continue—residency training beginning this July. The Defense Department has not publicized its intention to increase the quota by 80 per cent but it is a fact, nevertheless. A significant point is that Defense raised the quota *without* concurrence of Health Resources Advisory (Rusk) Committee, which opposes this program because it means that many more Priority III physicians (non-veterans) in older age groups will be required as replacements.

Also without Rusk Committee approval, Defense is making plans to give residency deferment to 1,000 members of the 1956 graduating classes upon completion of their internships in July, 1957.

Motivating the Pentagon in these bold moves were: (1) necessity of stockpiling as many prospective specialists as possible against the day (only fifteen months distant) when there will be no doctor-draft law to fall back on; (2) green light given by House Armed Services Committee to take appropriate action, whether or not Rusk Committee gives its assent.

During the fiscal year beginning July 1, 1957, armed forces will require upward of 4,600 medical replacements. While substantial numbers will come from the group completing internships this summer, it is evident that many hundreds will be drawn from the ranks of established physicians in their forties.

* * *

Medical bill payments were the subject of a resolution adopted recently by Chief Stewards Body of Local 7, UAW: "Be it resolved, that our Union urge its members to bring all doctor and hospital bills to the local Union and not to pay any overcharges unless they are approved by the Blue Cross-Blue Shield representatives."

* * *

Pan-American Association of Ophthalmologists.—Eye specialists from all the countries of the Western Hemisphere will gather in New York City, April 7-10, 1957, at the Hotel Statler, for the Fourth Interim Congress of the Pan American Association of Ophthalmology, according to an announcement by Brittain F. Payne, M.D., New York, President of the Association. The Congress will be held in conjunction with the annual meeting of the National Society for the Prevention of Blindness.

Three official subjects, to be discussed by invited speakers, have been selected. These are: Diseases of the Ocular Fundus; Ophthalmic Surgery; and Therapeutics in Present-Day Ophthalmology. "Free" papers on other

(Continued on Page 742)



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1. Pollock, B. E., and Pruitt, F. W.: Am. J. M. Sc., 226:172, 1953.

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(Continued from page 740)

topics may be included in the program so far as time allows. John M. McLean, M.D., Professor of Clinical Surgery in Ophthalmology, Cornell Medical College, New York, is chairman of the program committee. Those who wish to present papers are invited to communicate with Dr. McLean at The New York Hospital, 525 East 68th Street, New York 21, N. Y.

A cinema program relating to the three official subjects is being planned under the chairmanship of Wendell L. Hughes, M.D., Professional Building, Hempstead, N. Y. Ophthalmologists who have suitable films should write to Dr. Hughes. There will also be a number of interesting exhibits.

Conrad Berens, M.D., former President of the Association, and Algernon B. Reese, M.D., Chairman of the Fellowship Committee, both of New York, are serving as consultants on plans for the Congress.

Moacyr E. Alvaro, M.D., Sao Paulo, Brazil, Past President and Executive Director of the Association, is active in the preparations among Latin American ophthalmologists. He will head a large delegation of South American eye specialists from various Southern countries.

J. Wesley McKinney, M.D., Memphis, Tennessee, is Executive Secretary of the Association for countries North of Panama, and Jorge Balza, M.D., Buenos Aires, for those South of Panama.

Dr. Payne advised that ophthalmologists planning to attend the Congress make their reservations with the Hotel Statler direct.

* * *

The Committee on Cosmetics will sponsor a symposium at the 105th Annual Meeting of the American Medical Association in Chicago, June 11-15, 1956. The symposium will be held at 3:00 P.M., Wednesday, June 13, in the Ballroom of the Knickerbocker Hotel.

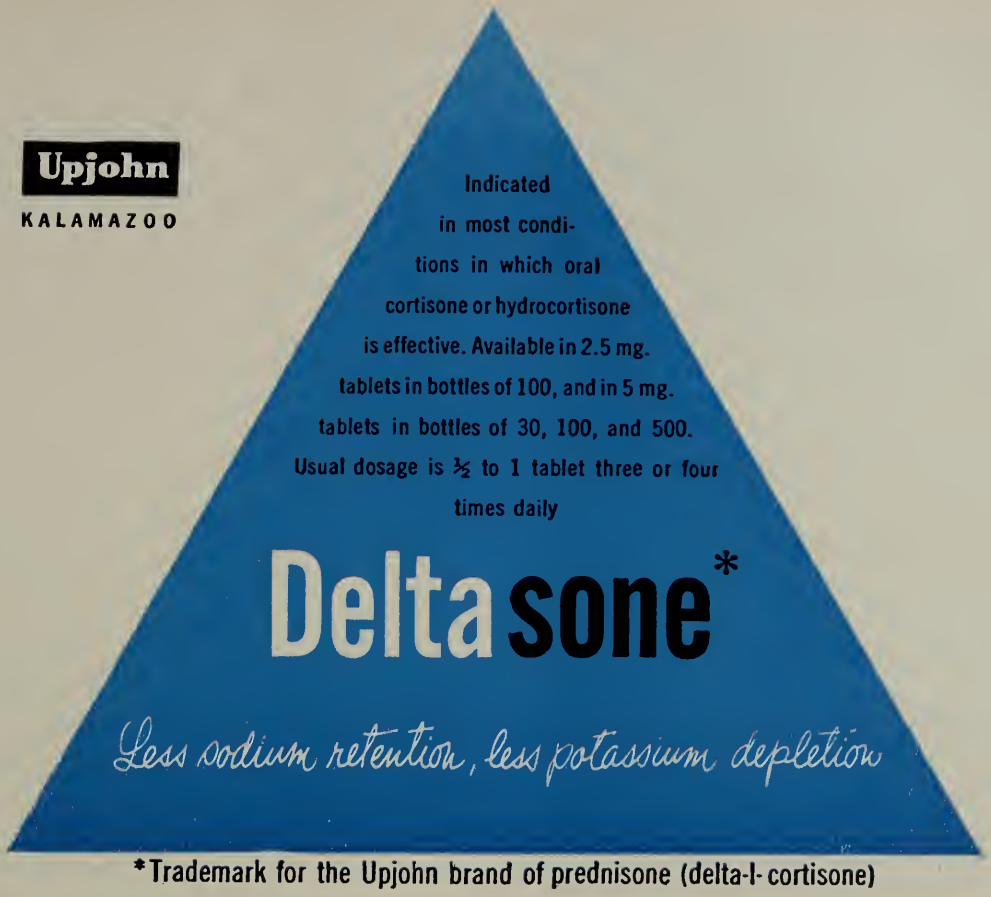
This is the first time in the history of the Association that a program has been specifically planned to inform the physician on the significance of cosmetics in medical practice. This symposium was prompted by the Committee's recognition of the increasing psychologic, physiologic and economic importance of a healthy attractive skin and the close relationship between these aspects and the use of cosmetics.

* * *

Edward **H. Leveroos, M.D.**, Director of the Council on Medical Education and Hospitals of the American Medical Association, speaking at The University of Michigan, April 19, 1956, stated that for a number of years many hospitals have not been giving newly graduated doctors who wished to enter general practice the attention they deserved.

Specialist boards themselves have come to recognize the needs of those interested in general practice, and as a result of action taken at the American Medical Association meeting in February this group will take it upon themselves to look into situations where hospitals refuse to recognize general practitioners, or family physicians, for treatment of their own patients, and positions on the hospital staffs.

Say you saw it in the Journal of the Michigan State Medical Society



Complete change will take considerable time, Dr. Leveroos stated. He went on, "It is difficult for smaller hospitals to carry out residency programs in both specialties and general practice because of facilities, space, and other limitations. All problems, however, are being worked on, and training of the general practitioner in the residency years will improve in a few years to the level of that in the specialties."

* * *

The awarding of three $3,000 scholarships for postgraduate study in surgery during 1955-1956 has been announced by the United States and Canadian Sections, International College of Surgeons. The funds were made available by the Women's Auxiliary to the two sections.

The recipients are: Dr. Thomas A. McLennan, surgical resident at the Bronson Methodist Hospital, Kalamazoo, Mich.; Dr. Joseph A. Malejka of Cheam, Surrey, England, now doing postgraduate work at the Bishop DeGoesbriand Hospital, Burlington, Vt., and Dr. William F. Walker of Dundee, Scotland.

Dr. McLennan received his medical degree from the University of Toronto Faculty of Medicine in 1950 and served with the Canadian forces in Korea for six months in 1952. He plans to continue his postgraduate studies in London.

Dr. Malejka, who was born in Poland, was active in the Polish underground movement in 1941-1944. He fled to Germany in 1946 and as a displaced person continued his medical studies. He attended University College, Dublin, from 1948 to 1952, and has been practicing general surgery.

Dr. Walker, who is a Royal Air Force veteran of World War II, is interested in metabolic aspects of surgery, especially reconstructive surgery. He is investigating chemotherapy in infection of the hand and hematoma of the rectus abdominis. Dr. Walker qualified for Fellowship in the Royal College of Surgeons (Edin.) in 1953 and the Royal College of Surgeons (Eng.) in 1954.

* * *

Testifying on a bill for a new medical care program for public relief recipients, a representative of the AFL-CIO has reiterated the joint organization's support for a program of national compulsory health insurance. The witness, Nelson Cruikshank, head of the AFL-CIO department of social security, testified before the House Ways and Means Committee on H.R. 9120. Instead of the present system of medical care of public assistance recipients, this bill would provide an extra $3 per month of federal money for the care of each adult and $1.50 for each child. The money would be earmarked, and the states would have to match it dollar for dollar.

Mr. Cruikshank said the amounts were "pathetically inadequate," and that a better solution would be a system of national compulsory health insurance. He declared: "Our labor organizations have long advocated a government insurance program for prepaying the costs of hospitalization and medical care on the same general

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FROM CONGESTIVE
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TABLET
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*Fishberg, A. M.: Hypertension and Nephritis, ed. 5, Philadelphia, Lea & Febiger, 1954, pp. 177-178.

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INTENSIVE POSTGRADUATE COURSES
STARTING DATES—SUMMER & FALL, 1956

SURGERY—Surgical Technic, two weeks, July 23, August 6
Surgical Anatomy and Clinical Surgery, two weeks, September 24
Surgery of Colon and Rectum, one week, September 17
General Surgery, two weeks, September 10
Thoracic Surgery, one week, October 1
Esophageal Surgery, one week, September 24
Breast and Thyroid Surgery, one week, October 22
Fractures and Traumatic Surgery, two weeks, October 15

GYNECOLOGY AND OBSTETRICS — Obstetrics and Gynecology, three weeks, October 22
Office and Operative Gynecology, two weeks, September 17
Vaginal Approach to Pelvic Surgery, one week, September 10

MEDICINE—Electrocardiography and Heart Disease, two-week basic course, July 9
Internal Medicine, two weeks, September 24
Gastroscopy and Gastroenterology, two weeks, September 10
Gastroenterology, two weeks, October 22
Dermatology, two weeks, October 15

RADIOLOGY—Diagnostic X-ray, two weeks, September 17
Clinical Uses of Radioisotopes, two weeks, October 8

UROLOGY—Two-week Course, October 8
Cystoscopy, ten days, by appointment

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approach followed in old-age and survivors insurance. Through regular contributions related to earnings, people would then be entitled to have their medical costs paid from the accumulated funds as a matter of right, without a means test. The AFL-CIO Convention endorsed both a national health insurance system, as part of a broad health program, and hospitalization insurance for persons receiving OASI benefits."

While it is expected that the present doctor draft act will be allowed to expire July 1, 1957, the Department of Defense contemplates asking for an amendment to the regular draft. The amendment would provide for a special registration of physicians and dentists, and their selective call up to age 35. The extent to which special calls would be made would depend on the growth of the regular medical corps.

* * *

Bills of particular interest to the medical profession which *passed* both houses of the Michigan Legislature and have been signed, or await signature, by the Governor include:

HB 21—Establishes diagnostic centers under direction of Mental Health Commission; permits admittance of committed patients for 60 days; requires diagnosis of patient before final admittance to state institution by Probate Court.

HB 126—Raises annual license fee for narcotic drugs to $2.00.

HB 143—Extends state polio program to June 30, 1957.

HB 382—Transfers licensing of nursing homes from Social Welfare Commission to State Health Commissioner; defines a nursing home; provides for establishing and enforcing minimum standards of maintenance and operation; creates an advisory committee to advise the Health Commissioner.

SB 1015—Establishes complete new Veterinary Medicine Act.

SB 1109—Increases Old Age Assistance to $80 per month and to $90 a month for hospitalization.

SB 1310—Provides that county boards of supervisors, cities, villages, school districts or townships may appropriate money for community mental health clinics (formerly child center and child guidance clinics).

SB 1311—Provides that counties over 100,000 in population, in operating hospitals for the treatment of contagious and infectious diseases, may operate a psychiatric ward for mentally disturbed patients, both indigent and non-indigent, approved by the State Department of Mental Health.

* * *

The American Congress of Physical Medicine and Rehabilitation will hold its thirty-fourth annual scientific and clinical session September 9-14, 1956, inclusive, at The Ambassador, Atlantic City, N. J.

Scientific and clinical sessions will be given September 10, 11, 12, 13, and 14. All sessions will be open to members of the medical profession in good standing with the American Medical Association.

In addition to the scientific sessions, annual instruction seminars will be held. These lectures will be open to physicians as well as to therapists, who are registered

with the American Registry of Physical Therapists or the American Occupational Therapy Association.

To stimulate interest in the field of physical medicine and rehabilitation, the Congress of Physical Medicine and Rehabilitation will award annually a prize for an essay on any subject relating to physical medicine and rehabilitation. The contest, while open to anyone, is primarily directed to medical students, interns, residents, graduate students in the pre-clinical sciences and graduate students in physical medicine and rehabilitation.

Full information may be obtained by writing to the executive secretary, Dorothea C. Augustin, American Congress of Physical Medicine and Rehabilitation, 30 North Michigan Avenue, Chicago 2, Illinois.

* * *

Leroy A. ("Cap") Potter, longtime friend of the medical profession as a valuable employee of the Michigan Department of Health, and an honorary member of the Michigan State Medical Society (elected September 1952), died early in April at his residence in Lansing.

Cap Potter's zeal and devotion to duty long will be remembered by the officers and members of the Michigan State Medical Society and those who knew him and his accomplishments.

* * *

Diabetes is a chronic disease which develops when the body can't utilize some of the food you eat, especially sugars and starches. Many are diabetics without being aware of it.



L. G. Christian, M.D.

L. G. Christian, M.D., Lansing, was honored by the Ingham County Medical Society at its Clinic Day held May 3, in Lansing. A member of the Society for thirty-four years, Doctor Christian received the Society's Service Citation "for many years of outstanding service."

In presenting the Society's scroll, Grover C. Penberthy, M.D., Detroit, credited Doctor Christian as being one of the pioneers responsible for establishment of the annual May Clinic twenty-eight years ago.

The citation read in part: "Doctor Christian has enriched the practice of medicine in this community, and focused our attention on the significance of medical education in general hospitals."

Doctor Christian's role in shaping general policies of both states and national medical societies was lauded.

* * *

The Tenth Annual Rocky Mountain Cancer Conference will be held July 11-12 in Denver, Colorado. The program is sponsored by the Colorado State Medical Society and the Colorado Division of the American Cancer Society. For program and particulars write John S. Bouslog, M.D., Chairman, 835 Republic Building, Denver 2, Colorado.

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William S. Jones, M.D., Menominee, President of the Michigan State Medical Society and a native of Georgia, attended the annual meeting of the Medical Association of Georgia in Atlanta on May 13-14-15-16.

The House of Delegates of the Medical Association of Georgia conferred Honorary Membership upon Dr. Jones on this occasion.

Congratulations, Dr. Jones, on this signal honor!

* * *

Ira G. Downer, M.D., Detroit, was honored by the Lapeer County Medical Society at its April 18 meeting in North Branch, the native city of Doctor Downer. Labelled as "the North Branch boy-who-made-good" on this occasion, Dr. Downer spoke to the Society on "Acute Appendicitis, History and Treatment of Complications."

* * *

John B. Barnwell, M.D., formerly of Ann Arbor, has been appointed Assistant Chief Medical Director for Research and Education in the Department of Medicine and Surgery of Veterans Administration, Washington, D. C.

Congratulations, Dr. Barnwell!

* * *

Blue Cross-Blue Shield. During the past year, Blue Cross across the nation achieved an enrollment of 3,706,899 persons, according to report issued at the annual Conference of Blue Cross Plans held in April.

* * *

1956 Michigan Clinical Institute Statistics: Among the specialties, general practice led with a registration of 466, followed by surgery with 219, medicine by 174, pediatrics by 48 and obstetrics and gynecology, 47. A total of 178 residents and interns were registered. Eighty-two doctors did not indicate a specialty.

Populationwise, Detroit registered the greatest attendance with a total of 628. Flint followed with 75, Lansing with 47, Ann Arbor with 46, Dearborn with 36, Saginaw with 33, Pontiac with 25 and Grand Rapids with 24. Eighty Michigan communities sent two or more physicians to the 1956 Michigan Clinical Institute; one each came from eighty-four other Michigan communities.

A total of ninety-three M.D.'s came from outside of Michigan, Canada leading with forty-five followed by Ohio with twenty-three.

* * *

Michigan Heart Association officers for the year 1956-57 are Earle A. Irvin, M.D., Detroit, President; M. S. Chambers, M.D., Flint, President Elect; F. D. Dodrill, M.D., Detroit; L. Fernald Foster, M.D., Bay City; F. D. Johnson, M.D., Ann Arbor; and Frank N. Isbey, Detroit, as Vice Presidents; Robert E. Fisher, M.D., Battle Creek was chosen as Secretary; Alfred T. Wilson of Detroit was Treasurer.

Secretary of Defense Charles E. Wilson, Washington, D. C., was chosen as Honorary Chairman of the Board.

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Hoover Commission Recommendations: Out of 314 Hoover recommendations that would save $5,500,000,000 annually, 141 could go into effect by order of the President of the United States or an executive agency head!

* * *

"Preventive Health Measures as Applied to the Executive" was the subject of the program of an entire afternoon during the recent annual convention of the National Stationery and Office Equipment Association. Three doctors of medicine told Association members "how to keep business executives out of the cemetery."

Congratulations NSOEA!

* * *

To acquaint several hundred prominent leaders in education, industry, politics, labor, religion, business, the press and other professions, with the vast amount of scientific work in which the medical profession is constantly engaged and with new developments in the field of medicine, the American Medical Association has extended invitations to several hundred prominent leaders to view the AMA scientific and technical exhibits during its annual session in Chicago on June 11-15.

* * *

The American Medical Directory has been completed, copies having been shipped to subscribers in May. The 1956 edition shows 218,061 physicians, a gain of 16,784 over 1950, when the last Directory was issued —an average yearly gain for the past six years of 2,797.

Michigan shows a gain of 963 physicians in the past six years.

Physicians' Estates.—The Hartford County (Connecticut) Medical Society recently studied 144 obituaries of local doctors of medicine and probate court cases involving their estates. They study revealed some startling facts, such as:

One out of eight physicians who died between 1940 and 1953 was in debt at the time of death.

Of the 144 doctor estates studied, one out of three left net assets of less than $10,000.

Only one doctor in eight survived his wife!

The doctors aged forty to fifty died in a ratio of 2:1 in comparison with the general population, and in the sixty to seventy bracket, the doctors' death rate was 50 per cent higher than the insurance table.

The two vulnerable age periods for medical men were forty to fifty and sixty to seventy.

Heart diseases and cerebral hemorrhage were the chief causes of death.

One out of three physicians left no will!!!

* * *

The Michigan State Medical Assistants Society convention will be held at the Detroit Leland Hotel, Detroit, September 26-27, 1956. A complete copy of the program will be published in the official MSMS Annual Session program. Some of the speakers announced by MSMAS include: James D. Fryfogle, M.D., Detroit, on "Facts and Figments of Heart Surgery"; W. W. Bauer, M.D., Chicago, on "Stop Annoying Your Patients"; Walter P. Anith, Detroit, (U. S. Bureau of Narcotics) on "Narcotic Regulations," and Harold A. Wallace, St. Louis, Missouri (President, American Trade

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Association Executives), on "Making Yourself More Valuable."

MSMS members who authorize their assistants to attend the MSMAS annual conventions are assured of additional enthusiasm and useful knowledge on the part of their office aides.

* * *

Mrs. William G. Mackersie, Detroit, Past President of the MSMS Woman's Auxiliary, addressed the Michigan State Medical Assistants Society at its semi-annual Presidents' Conference in Flint on April 15. Mrs. Mackersie's subject was "Parliamentary Procedures." Another speaker was Carol Towner of Chicago, Director of Special Services, AMA Public Relations Department. Mrs. Towner's topic was "Ethics in the Doctor's Office."

The MSMS General Practice Section proudly announces that Kenneth B. Babcock, M.D., Chicago, has accepted invitation to be banquet speaker at the combined meeting of the MSMS General Practice Section-Michigan Academy of General Practice, English Room, Sheraton-Cadillac Hotel, Wednesday, September 26.

The Upjohn Company of Kalamazoo will sponsor a reception honoring Dr. Babcock and the officers of the Section.

Perry S. MacNeal, M.D., of Philadelphia, has been selected by the General Practice Section officers to appear on the MSMS Annual Session Assembly program, September 26 from 9:00 to 9:30 a.m. His topic before the Assembly will be "Diseases of the Adrenal Cortex." For the General Practice Section meeting (same date at 5:00 p.m.) Dr. MacNeal has been invited to discuss "Office Management of Diabetes Mellitus."

The Detroit Medical News editorial, "Medical Education is a Community Problem," written by Louis J. Bailey, M.D., DMN editor, was reprinted *in toto* in *The Detroiter,* the weekly publication of the Detroit Board of Commerce, issue of April 23.

Dr. Bailey's pungent sentences ended with this paragraph.

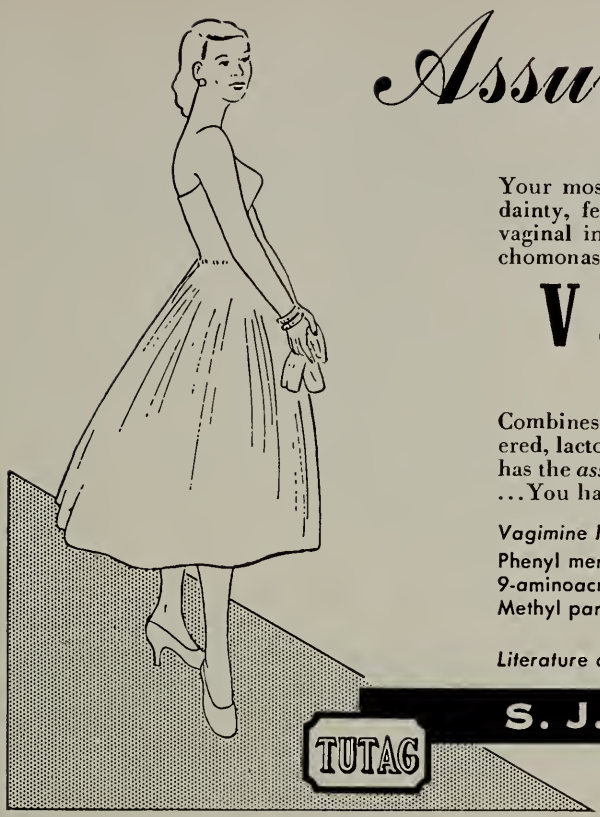
"The problems arising in scientific education—medical education in particular—are community problems. They deserve and must get the attention of community leaders everywhere."

* * *

Careers Unlimited: Through the sponsorship of Michigan Health Council, various health careers were featured in the "Careers Unlimited" Conference held in Detroit, March 12-23.

Through this participation more than 40,000 junior and senior high school students from the Detroit area learned first hand of the many interesting job opportunities in the health field. "Open House" for parents was arranged during two night sessions with some 5,000 adults attending.

Taking its place with business, industry, commerce, and the various service occupations, the Michigan Health Council exhibit attracted over a two weeks' period the attention of the youngsters in a manner beyond expectation.



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Phenyl mercuric acetate	3.5 mg.	Tyrothricin	0.5 mg.
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Through the co-operation of more than 20 health organizations, the M.H.C. exhibit was staffed with people well qualified to discuss health work, and more than 30,000 pieces of printed material were distributed. Special pieces, including the MSMS pamphlet "Planning Your Career," were given interested senior students, teachers and counselors.

Favorable comments from all areas of interest indicate the desire and the need for continued, and even broader, participation next year.

* * *

With the tuberculosis death rate continuing its gratifying sharp decline, the tuberculin reaction is becoming increasingly important in differential diagnosis.—James E. Perkins, M.D., *Journal-Lancet,* April, 1955.

* * *

Maturing Series E. Bonds Earn Additional Interest.—The Treasury offers three choices to holders of maturing Series E Savings Bonds:

Choices.—Bondholders may: (1) accept cash, if they so desire; (2) continue to hold maturing bonds for up to ten additional years with an automatic interest-bearing extension; (3) exchange them in amounts of $500 or multiples of Series K Bonds, which earn current income at the rate of 2.76 per cent payable semi-annually, and which are payable at par on one calendar month's notice any time after six months from issue date.

* * *

MSMS President W. S. Jones, M.D., is a busy man. In addition to regular attendance at meetings of The Council and its Executive Committee, Dr. Jones has been "barnstorming" the State of Michigan. He has presented his talk entitled "Seventeen for You" before medical societies and staff meetings in the following cities: Houghton — April 10; Marquette — April 11; Jackson—April 17; Lansing—April 18; Petoskey—April 19; Port Huron—May 8; Detroit and Flint—May 17; Lansing—June 19, and Sault Ste. Marie—June 22-23.

DOCTOR LOCATIONS—THROUGH APRIL 30, 1956

Placed by Michigan Health Council *Name*	*Approximate* *Date*	*Opened* *Practice in*	*From*
George Lalime, M.D.	February 1	Battle Creek	Boston, Massachusetts
Alvin Ratzlaff, M.D.	April	Onaway	California
Assisted by Michigan Health Council			
Luther Zick, M.D.	January	St. Joseph	Grand Rapids, Minnesota
John C. Mayne, M.D.	March	Bay City	Detroit
Robert Ambrose, M.D.	April 1	St. Clair Shores	Detroit Residency
Arnold Kiessling, M.D.	April	Jackson	Detroit
Allan L. Cline, M.D.	April	Pontiac	Muskegon
John A. Ottum, M.D.	April	Detroit (Residency)	California
Robert Painter, M.D.	April	Grant	Pennsylvania

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State Narcotic License Fee Increased.—The fee for Michigan's annual narcotic drug license has been doubled by action of the 1956 Legislature. The cost will be $2.00 beginning with the license for the state's next fiscal year, July 1, 1956—June 30, 1957. A license is required for all persons who "sell, prescribe, administer or dispense any narcotic drugs," as well as for manufacturers and wholesalers. The State Director of Drugs and Drug Stores is the licensing agent.

* * *

Medical Society Legal Counsels Convene.—Attorneys from every section of the nation gathered in Chicago, April 19-20, in the first formal, full-scale attempt to bring together the counsellors who advise medical societies on their many legal problems. J. Joseph Herbert, of Manistique, MSMS Legal Counsel, was one of the leaders in organizing the conference and took a prominent part in the program.

On the premise that the legal problems of medicine and their solution are similar in all parts of the country, the meeting was called under sponsorship of the AMA Law Department to consider mutual problems and to exchange views and experiences. Among the 100 registrants, almost every state society was represented, along with several county societies and specialty societies.

Anti-trust laws and related problems, corporate practice of medicine, grievance committees and disciplinary problems, professional liability, interprofessional codes of conduct, and legislative action were among the topics explored in panel discussions.

MEDICAL TELEVISION SHOWS

Produced by Michigan Health Council

1956			
March 4	WJBK-TV Detroit	Postgraduate Medical Education (MCI)	L. W. Hull, M.D., Detroit B. M. Harris, M.D., Ypsilanti
March 11	WJBK-TV Detroit	A Life to Save	Film George Matthews, Detroit
March 18	WJBK-TV Detroit	Community Health Week	Mrs. Edna Harrison, Detroit Norbert Reinstein, Detroit
March 25	WJBK-TV Detroit	Geriatrics—Living Today	A. Hazen Price, M.D., Detroit Perry C. Gittins, M.D., Detroit
April 1	WJBK-TV Detroit	Epilepsy Month	Raymond D. Dennerll, Detroit James Lofstrom, M.D., Detroit
April 8	WJBK-TV Detroit	Cancer Detection	Leon E. Briggs, Detroit Mrs. John P. Carritte, Jr., Detroit
April 12	WKAR-TV East Lansing	April—Clean-Up Month	Richard G. Pfister, East Lansing Philip Jay, D.D.S., Ann Arbor
April 15	WJBK-TV Detroit	100 Years of Dentistry in Michigan	Joseph L. Champagne, D.D.S., Detroit Charles H. Jamieson, D.D.S., Detroit
April 19	WKAR-TV East Lansing	Dry Cleaning Fluids	Irving H. Davis, Lansing
April 22	WJBK-TV Detroit	A Medical Education	Film
April 26	WKAR-TV East Lansing	Summer Camps	Clifford Drury, Lansing
April 29	WJBK-TV Detroit	National Mental Health Week	Kenneth E. Moore, M.D., Ypsilanti William H. Holloway, M.D., Ypsilanti Mrs. LaDonna Kennedy, Ypsilanti

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WHAT THEY SAID ABOUT THE 1956 MICHIGAN CLINICAL INSTITUTE

Hendrik de Kruif, M.D., Fergus Falls, Minnesota: "I enjoyed the Michigan Clinical Institute very much. Many of the ideas brought out by the speakers have been particularly applicable to my practice and I've already found a good deal of use for them since my return to Minnesota; for example the suggestions on the use of Diuretics and the method of handling Serpasil and Ritalin for emotionally disturbed patients. This is not meant to leave you with the idea that a Michigan man could not likewise learn something by coming to Minnesota meetings!"

Walter L. Percival, M.D., Windsor, Ontario: "It is always a pleasure to attend the meetings of the Detroit Clinical Institute. As usual, new trends and restorations and reviews of older ideas are incorporated into a most worthwhile event. Specifically I noted that by the end of Dr. Alton Ochsner's excellent paper on the relationship of smoking to lung cancer that there wasn't a lighted cigarette in the entire ballroom!"

* * *

A two-month course in occupational health has been organized by the Institute of Industrial Medicine, New York University Postgraduate Medical School, to begin September 10. For program and information, write the Dean at 550 First Avenue, New York 16.

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CONFERENCE ON AGING

The University of Michigan's Ninth Annual Conference on Aging will be held at the Michigan Union and University Hospital in Ann Arbor, Michigan, July 9-11. The conference theme will be "Health for the Aging—Medical and Social Services." It is being planned by the Departments of Gerontology and Post Graduate Medicine of the University with the co-operation of the Michigan State Medical Society Geriatrics Committee.

Conference Highlights

Addresses

Healthy Added Years	E. L. Bortz, M.D.
Major Issues in Providing Medical Care for Older People	Nathan Sinai, Dr. P. H.
The Battle Against Chronic Disease	L. T. Coffeshall, M.D.
Trends in Gerontology	William B. Jountz, M.D.

Panel Discussions

Meeting the Costs of Medical Care for the Sixty-Five-Year-Old and Over	Odin Anderson, Ph.D.
Trends in Health Legislation for Older People	L. E. Burney, M.D.
Research on Health and the Aging Process	Ralph W. Gerard, M.D.

Physicians' Clinics

(arranged by Medical School)

1. Arthritis in the Older Age Group	William D. Robinson, M.D.
2. Hypertension and other Vascular Problems in the Older Age Group	Sibley Hoobler, M.D.
3. Orthopedic Problems in Relation to Arthritis and Vascular Diseases	Sylvester O'Connor, M.D.
4. Dermatological Problems in Old Age	Arthur C. Curtis, M.D.
5. Organic Brain Disorders in the Older Age Group	
6. Psychological Problems of Older People	
7. Hyperthyroidism and Hypothyroidism	

Demonstrations

Planning for Discharge and Continued Care at Home	James W. Rae, Jr., M.D.

Seminars

Undergraduate and Graduate Medical School Teaching and Hospital Training Program in Geriatric Medicine	E. V. Cowdry, M.D.
Health and the Aging Process	Ralph W. Gerard, M.D.

Workshops

1. Integrated Medical and Social Services	Arnold Kurlander, M.D.
2. Health Criteria for Retirement	To be announced
3. The Geriatric Clinic in the Hospital and in the Community	Samuel Gertman, M.D.
4. Health Assessment of the Aging	S. David Pomrinse, M.D.
5. What Older People Should Do to Maintain Their Own Health	Panels of Geriatric Committee Members
6. Planning New Housing and Long-Term Care Facilities	John W. Cronin, M.D.
7. The Problem of Mental Illness among the Aging	Raymond Waggoner, M.D.

Films

"Still Going Places" (Physical Restoration)
"The Cold Spring Idea" (Role of Education)

Make room reservations through the University of Michigan Extension Service, Ann Arbor, Michigan. Detailed programs will be sent to members of the Michigan State Medical Society.

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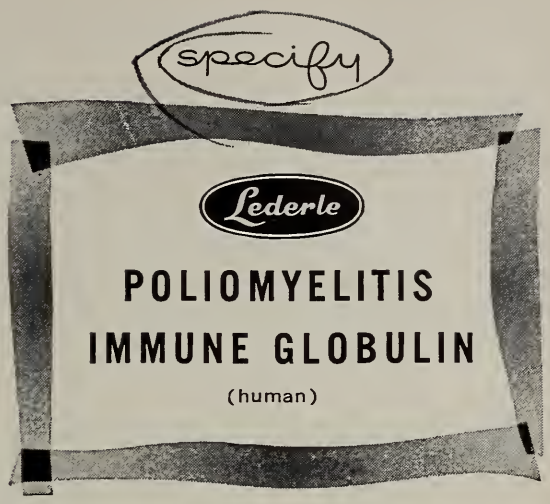
Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

THERAPY OF FUNGUS DISEASES. An International Symposium. Edited by Thomas H. Sternberg, M.D., Professor of Medicine (Dermatology) and Assistant Dean for Postgraduate Medical Education and Victor D. Newcomer, M.D., Associate Professor of Medicine (Dermatology). Presented June 23, 24, 25, 1955, by The Division of Dermatology, Department of Medicine, School of Medicine and Medical Extension, University Extension, University of California at Los Angeles. Boston and Toronto: Little, Brown and Company, 1956. Price, $7.50.

This book represents a compilation of fifty-five papers by 208 scientists presented at an international symposium on fungus infections at the University of California at Los Angeles. This book is not organized as a regular textbook on the subject of the treatment of fungus infections so that one only casually interested in the subject might not find the answer to the everyday problems.

It would be recommended more for one regularly doing work in this field because it contains much information previously unpublished and deals with newer fungicides such as nystatin, aromatic diamidines, nitrostyrenes, actidione, MRD-112, rhodanine and others.

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SURGICAL DIAGNOSIS. By Philip Thorek, M.D., F.A.C.S., Professor of Surgery, Cook County Graduate School of Medicine; Clinical Associate Professor of Surgery, University of Illinois College of Medicine; Diplomate of the American Board of Surgery; Co-Surgeon in Chief of the American Hospital; Attending Surgeon of the Cook County Hospital, Senior Attending Surgeon, Alexian Brothers Hospital; Member of American Association of Anatomists, Fellow of the American College of Chest Physicians. With drawings by Carl T. Linden, Assistant Professor of Medical Illustration, University of Illinois College of Medicine. Philadelphia and Montreal: J. B. Lippincott Company, 1956. Price, $12.00.

Prior to the publication of this book, undergraduate and postgraduate students alike have felt the need for a comprehensive and concise book which sets forth a plan to guide the reader in an orderly and accurate analysis and interpretation of the multiple and oftimes confusing symptom complexes of various surgical entities.

"Surgical Diagnosis" embodies the principle that diagnosis is the first and most important part of surgery, and utilizes the basic prerequisite for the investigation of any medical problem.

Practically every organ system and anatomic unit is dealt with in a manner easily understood by all concerned. Supplementing the text are creative illustrations which lend a graphic clarification to the various sections under discussion.

Of particular interest is Chapter 6, "The Esophagogastro-intestinal Tract." This section presents a comprehensive review of the major diagnostic features of the numerous intra-abdominal entities which provide for errors in diagnosis and subsequent mismanagement. Conspicuously absent in this chapter as throughout the book is the inference that the laboratory is primary in surgical diagnosis. Instead, emphasis is placed on (1) adequate history, (2) careful evaluation of symptom complexes, (3) a properly conducted physical examination and, (4) consideration of different laboratory data.

A well-written, concise, and graphically illustrated book which highlights an important advance in medical education, "Surgical Diagnosis" is strongly recommended for the library and desk of every physician.

ELECTROCARDIOGRAPHY. Fundamentals and Clinical Application. By Louis Wolff, M.D., Visiting Physician, Consultant in Cardiology and Chief of the Electrocardiographic Laboratory, Beth Israel Hospital; Assistant Clinical Professor of Medicine, Harvard Medical School. Second Edition. Illustrated. Philadelphia and London: W. B. Saunders Company, 1956.

This long-awaited second edition has 342 pages as compared to the first edition's 187 pages. It consists of three parts and an index.

Part I deals with "The Basic Principles of Electrocardiography." Included is a discussion of vector representation of dipoles and vector summation. The Einthoven triangles hypothesis and the ventricular gradient are well explained.

Part II is devoted to "Clinical Electrocardiography." In this section, all clinical problems seen in ordinary practice are covered. The discussion is well illustrated

by tablets, diagrams, and reproductions of electrocardiograms.

Part III discusses "The Normal and Abnormal Cardiac Mechanism," "Digitalis and Quinidine." Most of the material covered here did not appear in the first edition: it is a welcome addition. The normal cardiac mechanism and variants from it are beautifully discussed.

The index is adequate.

This is an excellent book for quick reference. While it lacks the completeness of some of the larger volumes on this complicated subject, it definitely has a place on the bookshelf of every interested but busy practitioner.

L.P.S.

METABOLISM, PHARMACOLOGY AND THERAPEUTIC USES OF GOLD COMPOUNDS. By Walter D. Block, Ph.D., Associate Professor of Biological Chemistry, Department of Dermatology, Medical School Research Associate, Institute of Industrial Health, University of Michigan, Ann Arbor, Michigan, and Kornelius Van Goor, M.D., formerly Instructor, Department of Dermatology, University of Michigan Medical School, Ann Arbor, Michigan. Springfield, Illinois: Charles C Thomas, 1956. Price, $2.75.

This is a little book of seventy-six pages dealing with the chemistry, metabolism, mode of action, uses, toxicity and the prevention of toxicity of gold compounds. It does not give an extensive review of the literature, but rather the basic points as a reference to the reader. While the main use of the gold compounds at present is in the treatment of rheumatoid arthritis, the physicians using these compounds will find this book a ready guide in solving the problems that arise.

H.E.A.

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(Continued from page 694)

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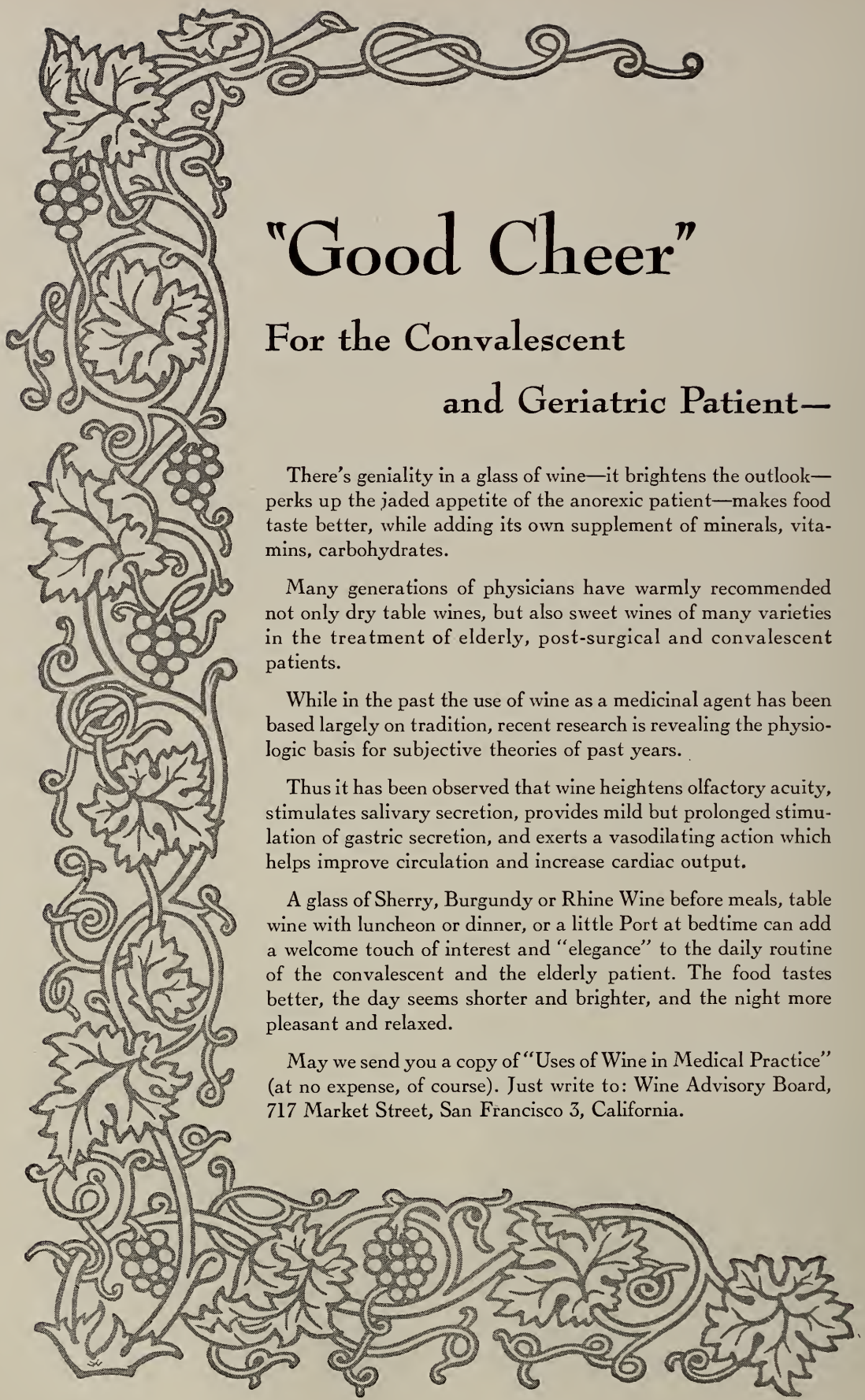
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Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 14, Minnesota.

Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, $6.00; single copies, 60 cents. Additional postage; Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year.

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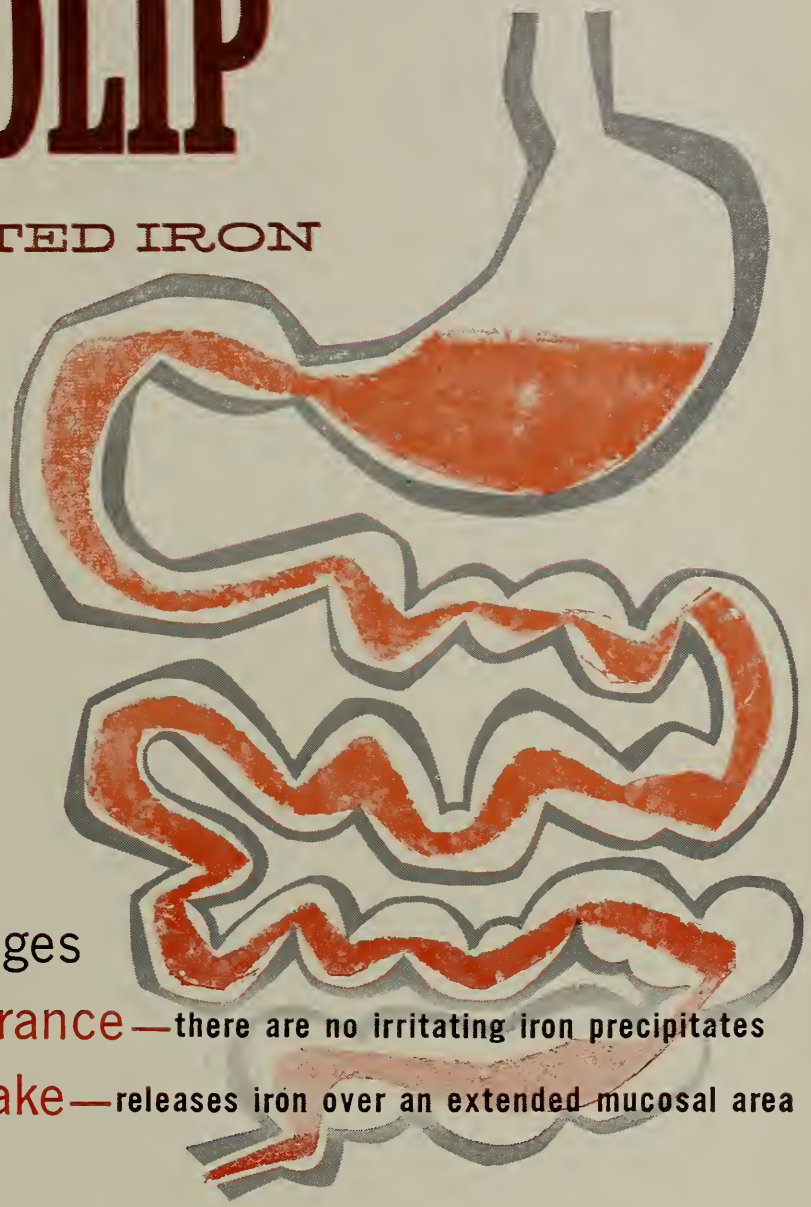
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You and Your Business

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of May 16, 1956

- **Financial reports** for the first quarter of 1956 were given study and approved. Bills payable were approved, and payment was authorized.
- **Veterans Administration's decision** to continue "Home Town Medical Care Program" in Michigan was reported. A letter of thanks was ordered dispatched to Veterans Administrator H. V. Higley for his judicious handling of this matter.
- **Governor's Commission on Prepaid Hospital Care Plans.**—The possibility of a prejudiced report that might well arouse the criticism of Michigan's 6,200 doctors of medicine was discussed. A communication was authorized sent to the Governor's Commission and to the Board of Regents of the University of Michigan urging a review of plans for this important study.
- **Committee Reports.**—The following were given consideration: (a) Permanent Conference Committee, meeting of April 14; (b) Committee on Health and Accident Insurance Policy Control, April 25; (c) Mental Health Committee, April 25; (d) National Defense Committee, May 2; (e) Committee on Arrangements for 1957 Michigan Clinical Institute, May 15; (f) Arbitration Committee, April 15.
- **Wm. A. Hyland, M.D.,** Grand Rapids, Chairman of Michigan's Delegation to AMA, reported on a caucus of Delegates and Alternate Delegates held this date and the discussion on numerous resolutions to be presented from Michigan and other states to the AMA House of Delegates, Chicago Session of June 10-15.
- **Appointments.**—E. F. Sladek, M.D., Traverse City, was appointed a member of the Committee on Michigan Medical Service.

 H. A. Furlong, M.D., Pontiac, was appointed as Chairman of Committee on Package Deals Between County Medical Societies and Local Welfare Departments. Members of the Committee are: W. W. Babcock, M.D., Detroit; H. H. Hiscock, M.D., Flint; L. L. LeFevre, M.D., Muskegon; and H. W. Wiley, M.D., Lansing.
- **Rheumatic Fever Coordinator** Leon DeVel's monthly report was presented and approved.
- **Norman F. Miller, M.D.,** Ann Arbor, was invited to be Discussion Conference Leader (Friday, September 28) at 1956 MSMS Annual Session.
- **IBM Membership Billing for MSMS**—This electronic system, to be inaugurated on January 1, 1957, was outlined in detail, and the installation was approved.
- **Honor Received.**—Report was presented that W. S. Jones, M.D., MSMS President, recently had been made an honorary member of the Georgia State Medical Society (Dr. Jones' native state).
- **The monthly report of Public Relations Counsel H. W. Brenneman** included digest of recent state legislation.
- **A new Committee on Healing Arts Study,** composed of Arch Walls, M.D., Detroit, Chairman; B. M. Harris, M.D., Ypsilanti; and H. B. Zemmer, M.D., Lapeer, was appointed to offer recommendations, through the Council, to the 1956 House of Delegates, to streamline the present outmoded healing arts statutes.
- **The Council** requested that the individual Councilors hold district caucuses, between July 23 and September 23, to which should be invited Delegates, Alternate Delegates and County Society officers, for the discussion of pressing socio-economic problems.
- **Legal Counsel J. Joseph Herbert** presented opinion re problem in obtaining autopsies, as well as a progress report on the Kopprasch case.
- **Matters of mutual interest** were discussed with Michigan's Health Commissioner A. E. Heustis, M.D.
- **Wayne County Medical Society's new building,** and the current drive for funds, was discussed by W. B. Harm, M.D., who stated $240,000 already has been raised toward the new building.

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Hometown Medical Care Continues for Michigan Veterans



Harvey Higley

It is no accident that Michigan, which pioneered the Veterans Hometown Medical Care program ten years ago, is the only state which will continue to administer such a program through its Blue Shield Plan next year.

This is due to the outstanding record of efficient, smooth operation of the Michigan veterans hometown care program. And that is no accident either. It, in turn, is due to the joint efforts of the doctors of Michigan working through their state medical society, to the efficiency of their Blue Shield Plan and the solid support of all the veterans organizations.

Last, but not least, it is due to the hard work and the effective and convincing presentation of these facts to the leaders and top-policy-makers of the Veterans Administration in Washington this April by leaders of the Michigan State Medical Society, Blue Shield and the state's veterans organizations. That is the real story behind the continuation of the hometown care program through Blue Shield for the thousands of veterans in Michigan.

Nearly a year ago the Veterans Administration had set July, 1957, for elimination of the program as administered by Blue Shield Plans. It was the fine record of the Michigan Program, plus the hard-hitting presentation of it to Washington that led Veterans Administrator Harvey Higley to reverse that decision for Michigan. The evidence of its need and value was incontrovertible. He ruled in May after detailed hearings that the veterans hometown care program will be continued indefinitely in Michigan under the administration of Michigan Medical Service (Blue Shield).

The Veterans Administration arrived at its original overall decision to eliminate the hometown care programs throughout the country on the basis of its estimate of a saving of $350,000 annually in administrative expense.

The VA's argument went something like this: The hometown care program, which was vital right after World War II and the Korean War, had now stabilized to a point where in the main veterans with service-connected disabilities could be treated at regional VA clinics. It felt, too, that the dwindling number who were treated through their hometown doctors could now be handled administratively directly between the doctors and the Veterans Administration. There was no longer any need for the Blue Shield plans to act as the administrative agency between the doctor and the VA to process payments to the doctors.

However valid this argument might be for the other states, it simply did not hold water for Michigan. It did not reflect the actual facts.

There has naturally been some decline in the volume of medical care needed by Michigan veterans since the peak of the early years of the program. But it was far from enough to justify discarding the program.

Here are the facts: During the ten years the veterans hometown care program has been in operation in Michigan through Blue Shield, there have been total payments to doctors for care authorized by the VA to veterans of a shade under $10,000,000. Even with the peak early years loading the average, this amounts to a little less than $1,000,000 a year.

Yet in the fiscal year of 1955—Blue Shield made payments to Michigan doctors for care totaling $860,000 involving 72,500 VA authorizations.

But that is only half the story. Those 72,500 authorizations last year had an average value each of $16.06. But the average payment made to doctors per authorization was $10.18.

In short, the average payment per authorization ran 36 per cent lower than the value of the authorization. And here is why: In many cases the authorization called for more services than the case actually required in terms of needed treatment. These figures are dramatic proof that the doctors of Michigan are rendering services strictly according to the veteran's needs. If fewer are needed than authorized, that is all the doctor performs and all the VA is charged for. The doctors

(Continued on Page 770)

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(Continued from Page 768)

of Michigan, in fact, are acting voluntarily as the watchdogs of economy for the VA.

These were the facts—this was the story the MSMS leaders, the heads of your Blue Shield Plan and the heads of the state's veterans organizations took directly to VA Administrator Harvey Higley.

Part of that story—and a very important part that had a great deal to do with Higley's decision to reverse himself and reinstate the Michigan program—lay in the record of efficiency Michigan Blue Shield had chalked up in administering it.

Since the program was started in 1946, Michigan Blue Shield handled the administration and payment of $10,000,000 involving nearly 800,000 services authorized for Michigan veterans by the VA.

Not only did the veterans receive prompt, needed medical care directly from their hometown physicians, but the administration of the program and the complex job of paying the doctors for this ten year period has averaged less than seven per cent. In fact, last year, the cost of administering the program through Michigan Blue Shield was down to 6.26 per cent.

These were the facts that caused the VA to change its mind so far as continuing the hometown care program in Michigan through its Blue Shield Plan was concerned.

But credit in large measure is due to Veterans Administrator Higley for his courage and forthrightness in reversing a top-policy decision when the easy way out would have been to ignore the facts.

William S. Jones, M.D., President of the Michigan State Medical Society, made that point very clear.

"Mr. Higley cannot be commended too highly for his wholehearted cooperation and willingness to hear and judge the facts objectively," Dr. Jones said. "In short, his attitude was 'show me I'm wrong and I'll change my decision. My basic interest is to see that the veterans of Michigan are assured the best possible method of receiving care within the boundaries of economical administration for the Veterans Administration.'"

Wilfrid Haughey, M.D., president of Michigan Medical Service (Blue Shield), said that the VA's decision to continue to administer the program through Blue Shield in Michigan is recognition that this method "is still the best and most efficient way to provide medical care for veterans with service-connected disabilities."

He added that it was quite a high compliment and indicates that after careful study the VA found that the administrative efficiency and know-how of Michigan Blue Shield can best deliver good medical service promptly and economically to the thousands of Michigan veterans who need it.

That was the story back in 1946 when Michigan Blue Shield and Michigan doctors through the Michigan State Medical Society developed the program voluntarily to meet a crisis.

The Veterans Administration was not equipped to provide medical services through its own facilities to the large number of veterans with service-connected disabilities that needed prompt effective treatment.

It was the veterans hometown care program, developed by Michigan's doctors and Blue Shield Plan, that provided the desperately-needed solution. Through it, the veteran needed only the VA authorization for treatment to go directly to his hometown doctor for care.

The tremendous task of effecting payment to the doctors—reasonably prompt and fair payment—was solved by using the administrative facilities of the Michigan Blue Shield Plan.

Blue Shield agreed to perform this service for the Veterans Administration for no other consideration than the actual cost of performing the mechanics of the job.

The result has been and will continue to be:

1. Assurance that the veterans of Michigan receive good care promptly and through the existing and convenient facilities of their hometown doctors.

2. Assurance to the VA that veterans will get needed care with a minimum of trouble and red tape to them and at a minimum administrative cost to the VA.

3. Assurance to the doctors of Michigan of payment of these services through its administration of their Blue Shield Plan promptly, equitably and with a minimum of time-consuming filing of claims.

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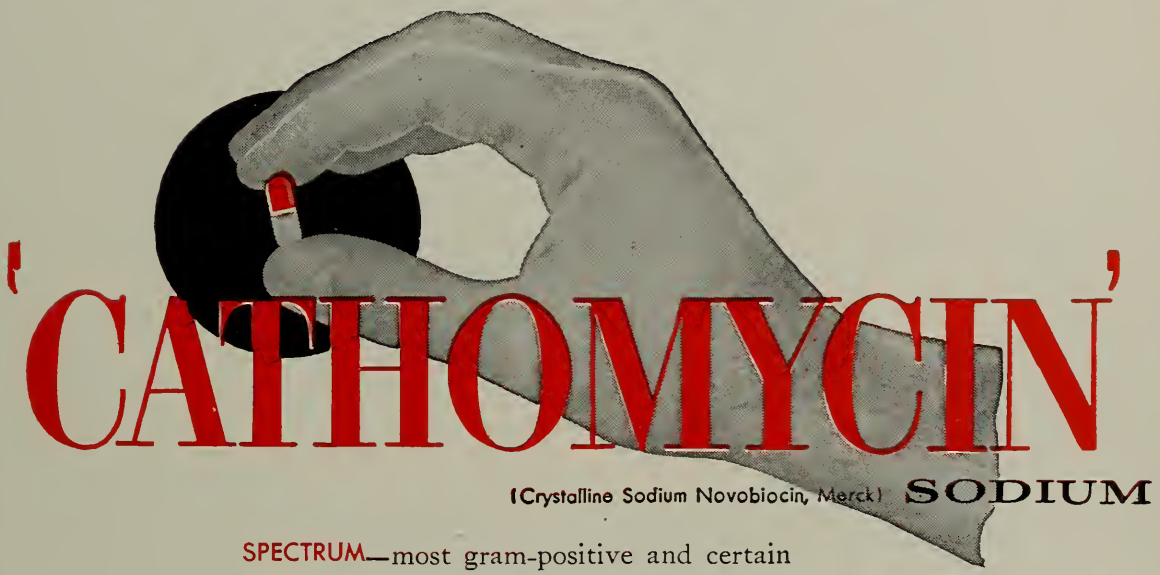
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Howard Cummings, M.D., Honored

Presentation of the *Distinguished Medical Citizenship Award* to Howard H. Cummings, M.D., by the Northern Tri-State Medical Association, was made at the annual meeting in Ann Arbor, April 12, 1956.

In presenting the award, John M. Sheldon, M.D., spoke as follows:

It is a great pleasure and privilege to present this justly deserved Award to Dr. Howard H. Cummings, my teacher and chief. It would not be possible to mention all his wonderful attributes, or tell even a few anecdotes that concern my chief in the time allotted to me. I shall try to cover only a few.

This august assembly is well aware that Dr. Cummings served as your President in 1942-43, and that while he was at the helm he was untiring in his efforts in the interest of postgraduate medical education. You are also aware that he has continued to contribute much sound advice, help and support to the organization.

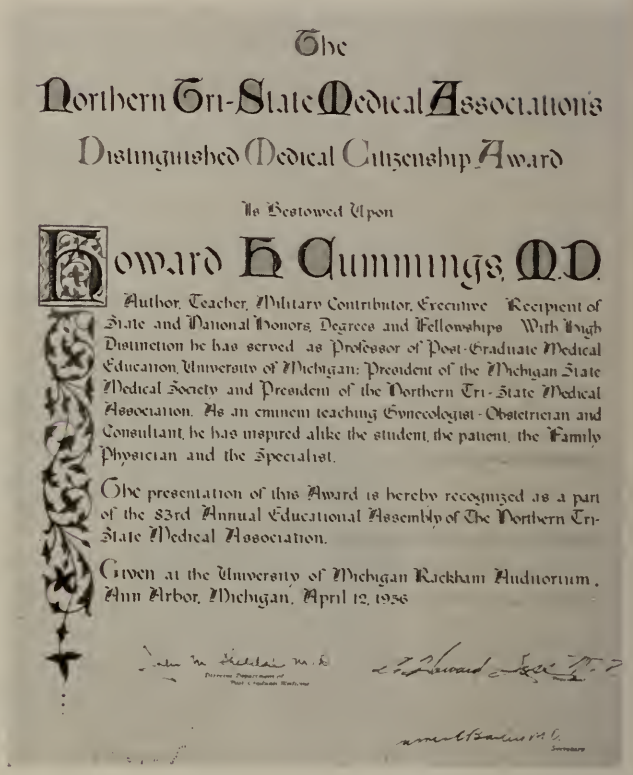
Dr. Cummings has also served faithfully and well in many other capacities. He was President of the Michigan State Medical Society in 1942-43, after having served as Councilor of the Society from 1933 to 1941. He has been a member of the Committee on Postgraduate Medical Education of the Society continuously since 1946.

Dr. Cummings received his early education in New York State, after which he entered the University of Michigan. At the end of his freshman year in Medical School, he spent the next year or two working for the President of an oil firm in Pennsylvania. We are fortunate that the lucrative oil business did not take precedent over Dr. Cummings' desire to be a doctor, and that he returned to the University of Michigan to graduate with the Class of 1910.

After graduation from the University of Michigan Medical School, he studied in the Obstetric Department at Johns Hopkins University. Upon returning to the University of Michigan, he was associated with the Department of Obstetrics and Gynecology from 1910 to 1913, and from 1917 to 1919. From 1913-1917, he was the executive head of the University Health Service, and contributed much to its development. He organized three ambulance units for service with the French Army in World War I, and served during the Second World War as a member of the Washtenaw County Appeal Board of Selective Service System.

In 1920, he entered the private practice of obstetrics and gynecology. He served as chief of that service at St. Joseph Mercy Hospital for many years, as well as chief of staff in 1942-43. He has an enviable reputation in his specialty and has contributed many articles to medical literature.

Among the professional and learned societies of


The
Northern Tri-State Medical Association's
Distinguished Medical Citizenship Award
Is Bestowed Upon
Howard H Cummings M.D
Author, Teacher, Military Contributor, Executive Recipient of State and National Honors, Degrees and Fellowships With High Distinction he has served as Professor of Post-Graduate Medical Education, University of Michigan; President of the Michigan State Medical Society and President of the Northern Tri-State Medical Association. As an eminent teaching Gynecologist-Obstetrician and Consultant, he has inspired alike the student, the patient, the Family Physician and the Specialist.
The presentation of this Award is hereby recognized as a part of the 83rd Annual Educational Assembly of The Northern Tri-State Medical Association.
Given at the University of Michigan Rackham Auditorium, Ann Arbor, Michigan, April 12, 1956

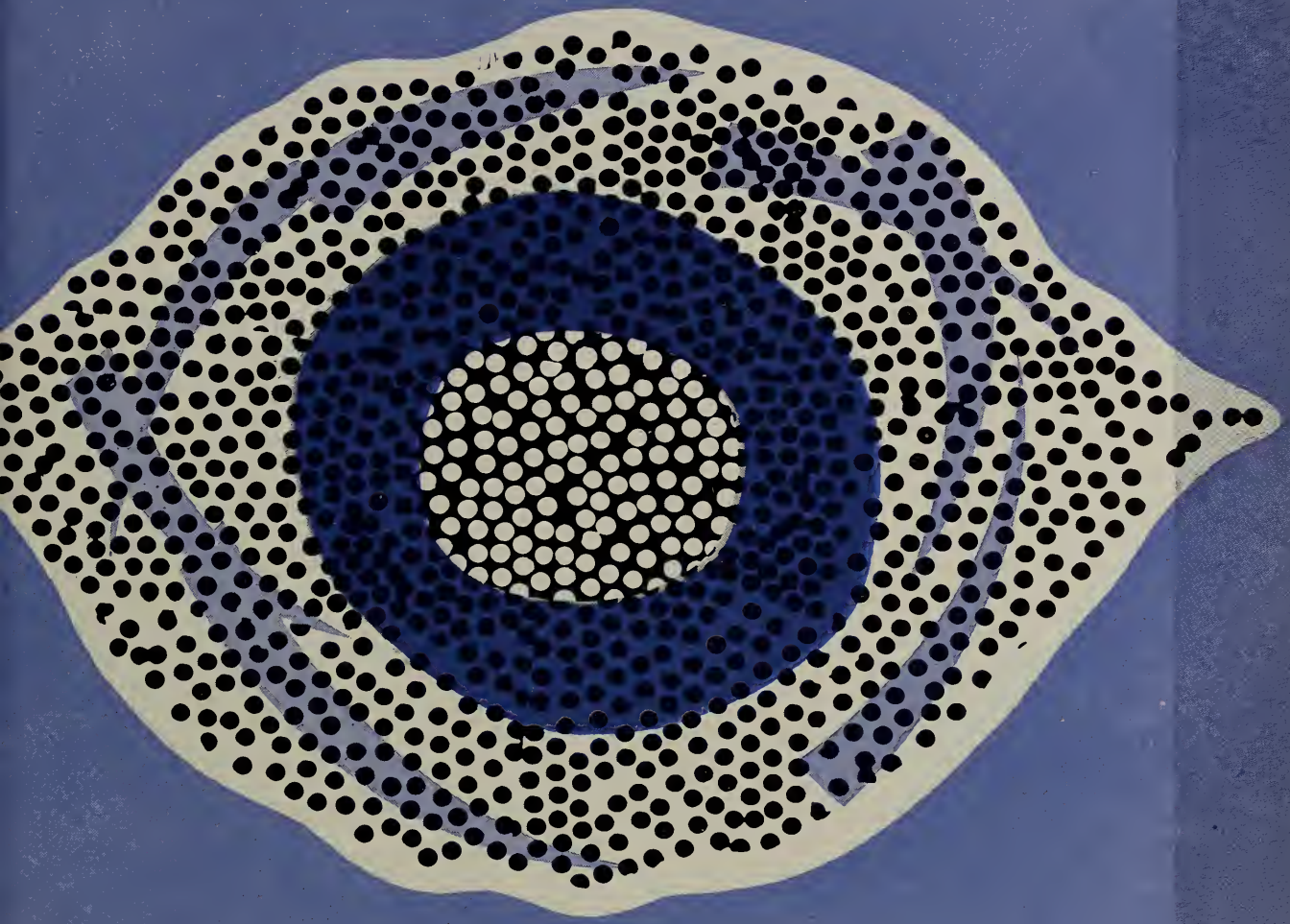
which he is a member are Alpha Omega Alpha, Sigma Xi, University of Michigan Research Club, the American College of Surgeons, and the Central Association of Gynecologists and Obstetricians. He is a Fellow of the American Academy of Obstetrics and Gynecology, of which he was one of the Founders. He is a Diplomate of the American Board of Obstetrics and Gynecology. He served the State as a member of the Michigan State Sanatorium Committee for many years.

Dr. Cummings has made an outstanding contribution to the educational program of the University in directing the co-operative efforts of the University of Michigan Medical School, the Wayne University College of Medicine, the Michigan State Medical Society and the Michigan Department of Health in the field of postgraduate medical education. He has appreciated fully the great value of, and given recognition to the excellent contribution which each of these institutions is making in the postgraduate medical teaching program for practicing physicians in many centers of the State. The program has long had national recognition and in 1948-49 Dr. Cummings served as secretary-treasurer of the Associated States Postgraduate Committee of the American Medical Association.

While he was Chairman of the Department of Postgraduate Medicine, both the extramural and intramural programs of postgraduate medical education have been

(Continued on Page 806)

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AHA ANNUAL MEETING AND SCIENTIFIC SESSIONS

A tentative program has been outlined for the 32nd Annual Meeting and 29th Scientific Session of the American Heart Association to be held in Cincinnati, October 26-31. The Scientific Sessions will be conducted at the Music Hall auditorium beginning on Friday evening, October 26, and continuing through Monday, October 29. The organizational meetings of the Association will follow the scientific presentations.

The opening Scientific Sessions on Friday evening will be devoted to instrumentation. General sessions, to be held on Saturday, Sunday and Monday mornings, will include papers of the broadest general interest, while simultaneous specialized sessions in the afternoon will provide opportunity for the presentation of papers of particular pertinence to those whose primary interest is in the fields of basic science, circulation, clinical cardiology, hypertension, cardiovascular surgery, rheumatic fever and congenital disease, epidemiology and the community or public health aspects of cardiovascular medicine. There will also be a number of symposia and panels, including one devoted to cardiac rehabilitation, and two special lectures, the Lewis A. Conner and George E. Brown Memorials.

The Netherlands Plaza Hotel will be the AHA Headquarters during the annual meeting period.

REVISED DIAGNOSTIC GUIDE ON CONGENITAL DEFECTS

A newly revised edition of the booklet, "Diagnosis of Cardiac Defects in General Practice," has been prepared for the American Heart Association by Regina Gluck, M.D., Assistant Clinical Professor of Pediatrics at Bellevue Hospital, New York.

The revision reflects the many advances in knowledge and in clinical experience with regard to diagnosis, management and treatment of congenital defects since the issuance of the prior edition in November, 1954. Particular attention is paid to the most recent developments in surgical correction of congenital anomalies.

Physicians may obtain copies from the Michigan Heart Association, Doctor's Building, 3919 John R, Detroit 1, Michigan.

BOOKLET AVAILABLE FOR PATIENTS WITH CORONARY DISEASE

Revision of the American Heart Association's booklet "Heart Disease Caused by Coronary Atherosclerosis" has been completed by Paul D. White, M.D., Boston, and is now available for physicians who wish to distribute copies to their patients.

The booklet is particularly designed to aid the coronary heart disease patient in gaining an understanding of the physiologic and pathologic phenomena underlying his condition. Included is a section on "What the Doctor Tells His Patient." Copies may be obtained from the Michigan Heart Association, Doctors' Building, 3919 John R, Detroit 1, Michigan.

AHA TO REVIEW U. S. PAPERS FOR INTER-AMERICAN CONGRESS

The American Heart Association will review all abstracts of papers by United States physicians and research scientists who wish to make presentations at the Inter-American Congress of Cardiology in Havana, November 11-17. This is in accordance with the regulations of the Inter-American Cardiologic Society, sponsors of the congress. These regulations provide that papers must first be submitted to the national cardiologic society of the country in which the author resides.

AHA MAKES WIDE DISTRIBUTION OF RHEUMATIC FEVER CRITERIA

Distribution by the American Heart Association of reprints of the statement, *Jones Criteria (Modified) for Guidance in the Diagnosis of Rheumatic Fever,* to 183,000 practicing physicians and 25,000 medical students has been undertaken with the co-operation of the National Heart Institute of the U. S. Public Health Service and of the American Medical Association.

The statement was first published in September,

(Continued on Page 778)

BETTER

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capacity is greatly enhanced. "Relief of symptoms is more complete and maintained for longer periods with relatively small doses."[2]

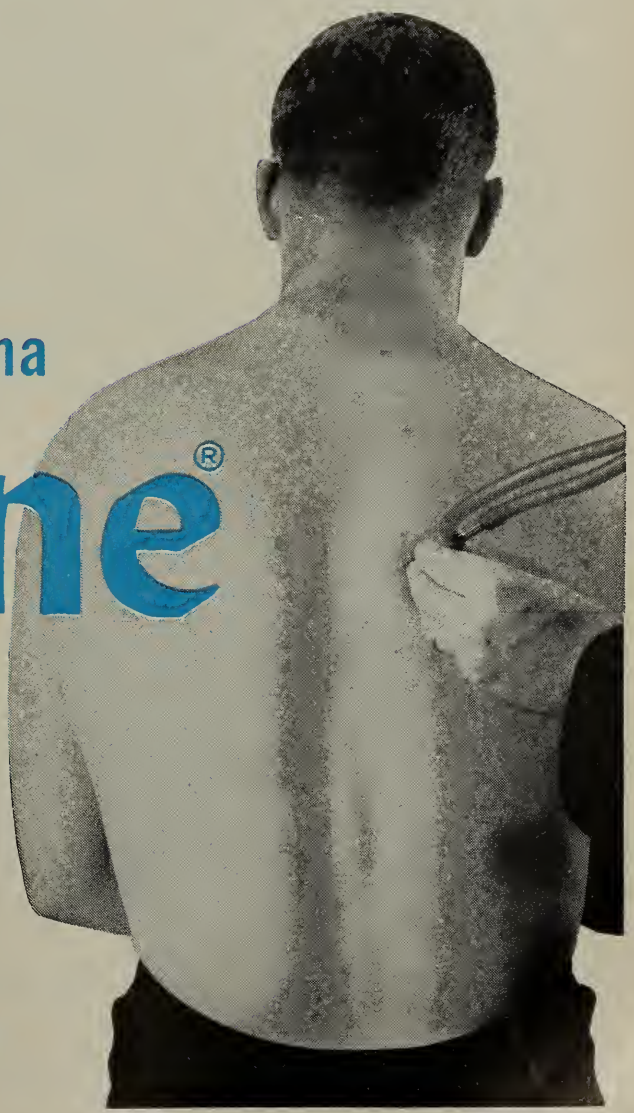
BALANCE

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1. Johnston, T. G., and Cazort, A. G.: J. Allergy 27:90, 1956. 2. Schwartz, E.: New York J. Med. 56:570, 1956. 3. Schiller, I. W., et al.: J. Allergy 27:96, 1956.

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AHA MAKES WIDE DISTRIBUTION OF RHEUMATIC FEVER CRITERIA

(Continued from Page 776)

1955, issue of the AHA's monthly bulletin for physicians, *Modern Concepts of Cardiovascular Disease.* It is a revision of the widely-accepted rheumatic fever diagnostic criteria originally drawn up by the late T. Duckett Jones, M.D. The modified criteria are intended as a guide to the physician which will help him to avoid the dangers of either over-diagnosis or under-diagnosis of rheumatic fever.

Additional copies of the Jones Criteria statement can be obtained from the Michigan Heart Association, Doctors' Building, 3919 John R, Detroit 1, Michigan.

HIGH BLOOD PRESSURE RESEARCH MEETING PROCEEDINGS PUBLISHED

The proceedings of the 1955 Annual Meeting of the American Heart Association's Council for High Blood Pressure Research, held in Cleveland last November, have been published in book form. The volume contains eight papers together with verbatim transcripts of ensuing discussions.

The proceedings offer a concentration of the latest knowledge in the field of hypertension, particularly with regard to its neurovascular aspects. Further information on the volume is available from the Association, 44 East 23 Street, New York 10, New York.

AHA ISSUES GUIDE FOR BLOOD VESSEL BANKS

Recognizing that modern advances in the diagnosis and surgical correction of cardiovascular diseases have made procurement, preservation and implantation of blood vessel grafts an important factor in the success of such surgery, a committee of the Scientific Council of the American Heart Association has drawn up a guide for establishment and operation of blood vessel banks.

The guide, "Recommendations for the Establishment and Maintenance of a Blood Vessel Bank," is designed to aid clinical investigators in the establishment of blood vessel banks under standard conditions and to encourage a "certain uniformity in the procurement and preservation of vascular grafts for evaluations."

In addition to its discussion of techniques involved in the utilization of vascular grafts, the guide also contains a section devoted to the various types of rigid and flexible plastic grafts, noting however that "only long-term post-operative observation in human recipients will give a definite answer on the fate of various types of vascular and plastic prostheses."

The guide also discusses the relative advantages of procurement of vascular grafts from the donor under sterile and non-sterile conditions. Sections are devoted to space requirements for banks, equipment, legal aspects of procurement, techniques, and evaluation of donor material based on age of donor, cause of death and interval between death and autopsy. Various types of sterilizing and preservative agents are described.

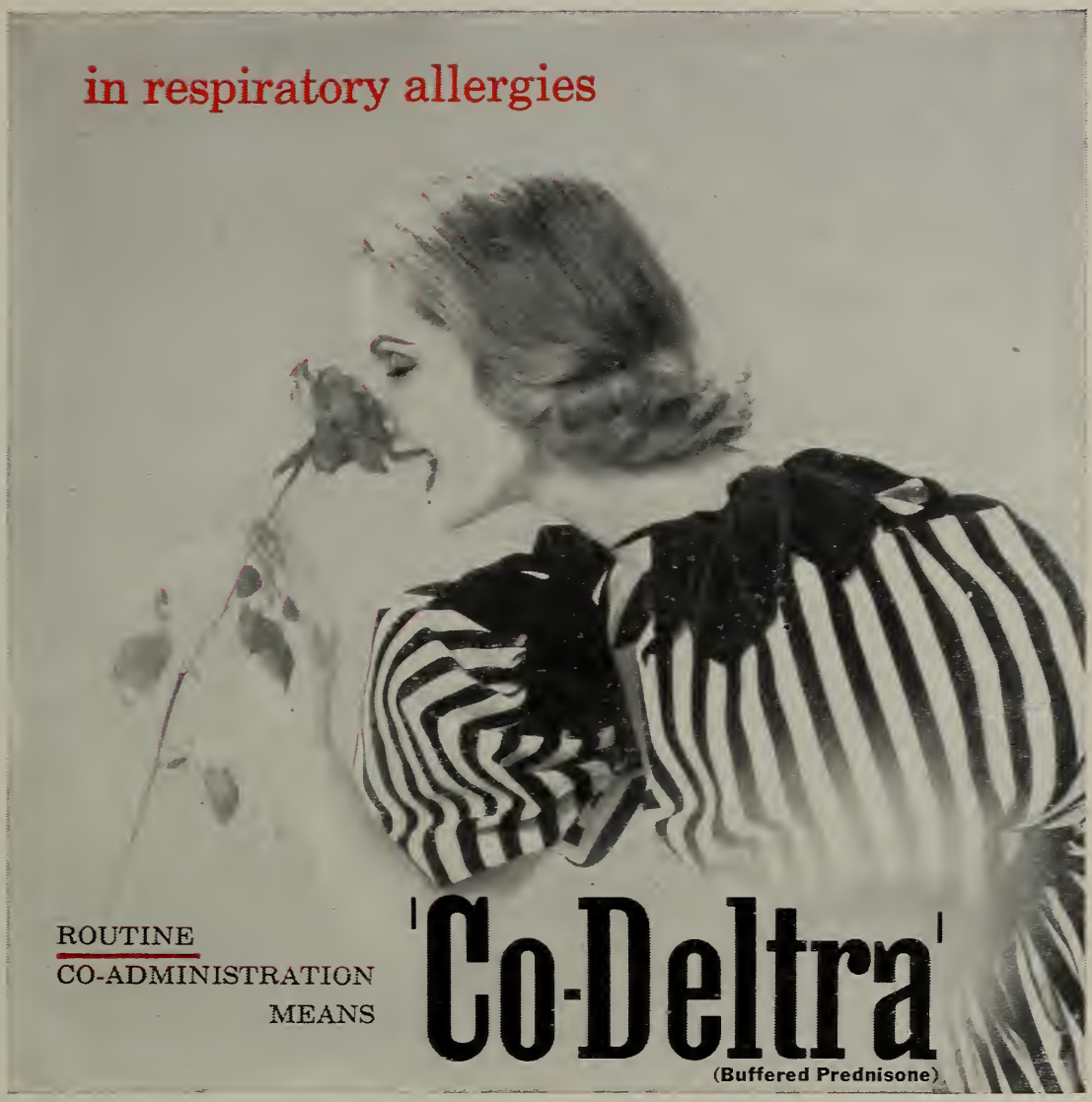
The recommendations for blood vessel banks were prepared for the Association's Scientific Council by a committee of four cardiovascular surgeons, Jere W. Lord, Jr., M.D., New York; Robert E. Gross, M.D., Boston; Charles A. Hufnagel, M.D., Washington, D. C.; and Abel A. Lazzarini, Jr., M.D., New York.

Single copies of the guide may be obtained by physicians from the Medical Director American Heart Association, 44 East 23 Street, New York 10. Information on procuring copies of the guide in quantity may also be obtained from this source.

MEDICAL TELEVISION SHOWS
Produced by Michigan Health Council

Date	*Station*	*Subject*	*Guests*
May 3, 1956	*WKAR-TV, East Lansing*	Hospital Gray Ladies	Mrs. Arnold Hopperstead, Lansing
May 6, 1956	WJBK-TV, Detroit	Occupational Therapy	Max K. Newman, M.D., Detroit Barbara Jewett, OTR, Detroit Jack Wilburn, OTR, Detroit Mrs. Catherine Sobieski, Detroit
May 10, 1956	*WKAR-TV, East Lansing*	Hospital Week—Student Medical Care	C. G. Menzies, M.D., E. Lansing
May 13, 1956	WJBK-TV, Detroit	Medicine U.S.A.—The Living Proof	A Film (A.M.A.)
May 20, 1956	WJBK-TV, Detroit	Operation X-Ray	Judge Frank Shemanske, Detroit Nicholas DeJanney, M.D., Detroit Mrs. John Miller, Detroit
May 24, 1956	*WKAR-TV, East Lansing*	Michigan Cerebral Palsy Week	Mark Brower, Lansing
May 27, 1956	WJBK-TV, Detroit	Pesticides and Solvents	Ralph G. Smith, Ph.D., Detroit Mr. James MacEwen, Detroit

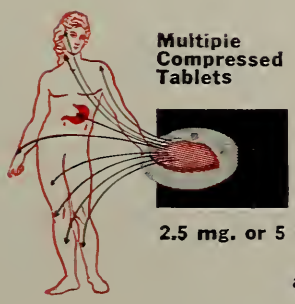
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References: 1. Boland, E. W., *J.A.M.A.* 160:613, February 25, 1956. 2. Margolis, H. M., *et al.* *J.A.M.A.* 158:454, June 11, 1955. 3. Bollet, A. J., *et al.* *J.A.M.A.* 158:459, June 11, 1955.

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ALL THE BENEFITS OF THE "PREDNI-STEROIDS" PLUS POSITIVE ANTACID ACTION TO MINIMIZE GASTRIC DISTRESS

Social Security Disability Freeze

In recent months, many physicians have heard from patients about the disability freeze provision in the social security law. This provision, added to the old-age and survivors insurance program in 1954, permits people who have prolonged total disability to apply to have their social security records frozen for the period of their disability. Thus, the time when they could not work and so had no earnings credited to their social security accounts does not count against them in determining their rights to benefits, nor the amount of benefits which will be payable to them at age sixty-five, or to their families in case they should die.

Before a worker's social security record can be frozen, he has to meet certain work requirements. His social security record up to the time of his disability must show that he was in fact a worker, with a fairly regular and recent work history. In addition, he must be shown to have a medically determinable physical or mental impairment severe enough to keep him from engaging in any substantial gainful activity—one which has existed for more than six months, and is expected to last indefinitely or end in his death.

Securing Medical Evidence of Disability

The medical evidence needed to establish the nature and severity of the applicant's disability, the date it began, and its prognosis comes from the doctor who has treated the worker and knows his case, or the hospital or institution in which the worker has been confined. A Medical Report form was designed to assist the physician in furnishing the needed medical evidence and to indicate the nature and extent of clinical detail which would be necessary. It is given to the applicant for the "disability freeze" and he is asked to have it filled out by the physician most familiar with his impairment. The form itself is modeled closely after the medical report used by major life insurance companies in their disability claims work. In adapting it for use in the "freeze" program, the recommendations of a Medical Advisory Committee were closely followed. This Committee, composed of well qualified representatives of the medical and related non-medical professions, gives advice and guidance to the Social Security Administration on the medical aspects of the "disability freeze" program.

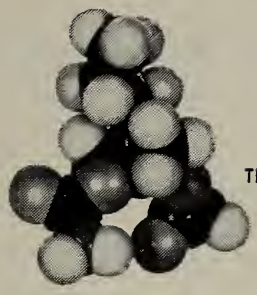
If you have received this medical form to fill out for any of your patients, you are probably aware that the law makes the disabled worker responsible for seeing that medical evidence is submitted for him and for paying any costs involved. The law does not permit the Government to pay any costs in connection with securing the medical evidence needed for a determination of disability. You may also know that to insure the confidentiality of the medical evidence, the medical report form is not to be returned to the patient, but is to be mailed by the physician direct to the local social security office. This office, incidentally, is ready to furnish additional information to the physician concerning the medical report form and the operation of the disability freeze.

Determining Disability

Determinations as to disability based on the evidence submitted are made under an agreement with the Federal Government, by professional members of an agency of the State in which the applicant resides. In most States, this is the vocational rehabilitation agency. Since referral of disabled individuals for any rehabilitative services which might return them to gainful work is an important aspect of the program, each person applying for the social security disability freeze is told about the availability of vocational rehabilitation services.

On the professional team in the State agency at least one member is a doctor of medicine. The team reviews and evaluates all medical evidence assembled in the applicant's file, as well as such non-medical factors as age, education and occupational experience. Certain medical guides and standards, worked out with the advice of the Medical Advisory Committee are used in the consideration of the medical evidence. But, although these guides and standards can be applied in most cases, they are not rigid and arbitrary. The final determination in each case is based on all the available facts on the individual's impairment and vocational history, and,

(Continued on Page 878)



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AMA Washington Letter

THE MONTH IN WASHINGTON

Before the end of the year hundreds of thousands of dependents of military personnel, living in all parts of the country, should be receiving their medical care from private physicians and in private hospitals under the new program authorized this year by Congress. While Defense Department has not yet completed regulations to implement the act, the law itself lays down the basic principles governing the program.

The House Armed Services Committee first attempted to decide on a system or systems for furnishing private care, through Blue Cross, Blue Shield, arrangement with state medical societies, commercial insurance or "home town care," such as Veterans Administration successfully employs. But the committee gave up on the problem, and Congress finally tossed it to the Secretary of Defense by stating in the bill that he shall ". . . after consultation with the Secretary of Health, Education, and Welfare . . . contract for medical care for such persons . . . under such insurance, medical service or health plan or plans as he deems appropriate." A Defense Department task force now is attempting to decide how to work out the contracts.

Although several groups of dependents will be entitled to medical care, only wives (or husbands) and children of men on active duty will be certified for civilian care. The others will be admitted to military medical facilities on "availability of space" basis. While generally spouses and children of active duty personnel will have a choice of private or military care, there is this limitation: The Secretary of Defense may designate certain areas where private care will not be authorized, if in his opinion those areas have military facilities adequate to care for the service families.

Dependents will be required to pay the following charges: For care in military facilities, subsistence and "in-hospital" charges (set by Secretary of Defense and currently $1.75 per day); for private care, the same fees or the first $25, whichever is the larger.

The time limit on private care is twelve months, but if hospitalization still is required after this period the dependent will be protected. In this case the Defense Department will transfer the dependent to a military facility or will make direct payment to a private hospital.

Although regulations will spell out limitations and authorizations in more detail, the law makes the following provisions:

Care in military facilities to include: (1) Diagnosis, treatment of acute medical and surgical conditions, treatment of "contagious diseases," immunization and maternity and infant care. (2) Hospitalization for nervous and mental disorders, chronic diseases or elective medical and surgical treatments *but only in "special and unusual cases"* and for not more than twelve months. This would be provided at the discretion of the Secretary of Defense. Dental care not authorized except in unusual cases, while abroad or at remote stations in the U. S.

Private care will include: (1) Hospitalization in semi-private accommodations up to one year for each admission, including all necessary services and supplies furnished by hospital. (2) Medical and surgical care incident to hospitalization. (3) Complete obstetrical and maternity service, including prenatal and postnatal care. (4) Physician or surgeon's services prior to and following hospitalization for bodily injury or surgery.

Under the private care program, some services may be furnished outside the hospital, such as surgery in a doctor's office, x-rays or laboratory tests, "but not what is normally conceived to be out-patient care." If experience shows they can be afforded, additional services may be authorized, but whatever the scope of private care, it cannot exceed that furnished in military facilities. Outpatient care will be furnished by military facilities, but "uniform minimal" charges may be imposed as a restraint on excessive demands.

NOTES: Federal appropriations for medical research are at an all-time record, explained in part by Senate approval of a 48 per cent increase over last year's funds.

Dr. Lowell T. Coggeshall, special assistant to HEW Secretary Folsom, believes some "wise changes" should be made in medical economics to facilitate payment for the "spectacular" new medical services. He expressed his views in addressing a group at the University of Pennsylvania Medical School.

Russia and eight satellites, out of active participation in World Health Organization for more than six years, now are back in; they agreed to pay 5 per cent of past-due assessments over a ten-year period.

The highway program contains a provision for a one-year study of traffic safety, a problem in which the American Medical Association has been actively interested for years.

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

VOLUME 55 JULY, 1956 NUMBER 7

Ear, Nose and Throat Symptoms Related to General Medical Conditions

By James B. Costen, M.D.
St. Louis, Missouri

THE principal topic of this discussion, which will relate clinical problems of mutual interest to the general physician and the otolaryngologist, is fluid in the middle ear spaces. Uncontrolled otitis media became the chief interest of numerous authors early in the use of chemotherapy, Tobey[1] in 1942 pointing out new and difficult changes in diagnosis and treatment of ear infections after five years' use of sulfonamides. One question was whether to medicate early with saturating doses before thrombosis appeared in the smaller vessels, or whether to wait for some antibody reaction to occur. Virulence and variations in sensitivity of different strains of organisms to therapy was apparent from the first use of sulfonamides. Whether it was good practice to administer a drug to full therapeutic limits, in a disease which shows a tendency to recovery in 90 per cent of the cases under well-proven procedures, was a decision to make. Also, the variation in reports of cures, Tobey pointed out, coincided with epidemics and cycles of virulence.

Penicillin appeared, wider coverage of bacterial strains was possible, and uncontrolled medication for trivial ailments produced a great number of drug-sensitive persons. Development of numerous mycins further expanded the bacterial spectrum susceptible to antibiotics. Bacteriological study of secretions and drug sensitivity tests of organisms assumed their vital role in treatment.

Actually it became clear at once that drugs given at random in certain types of infection had limited success. Henry and Kuhn[2] reported a series of 468 cases of middle ear infection, 47 per cent of whom would have received no benefit if bacteriological studies had not been made. Twenty-one important reports on this subject appeared before 1951, some giving emphasis to the need of surgical drainage in addition to antibiotics. Bilchick and O'Kane,[3] Williams,[4] and Hall[5] and others, in large series reports, pointed out the low incidence of mastoiditis requiring mastoidectomy in all cases receiving myringotomy, whether antibiotics were used or not. Evans[6] in 1951 reported a study of thirty-six mastoidectomies in thirty cases admitted from outpatient service, all of whom had inadequate antibiotic therapy, and *not one of whom had myringotomy.* Goodale and Montgomery[7] recently emphasized the need for myringotomy and selective antibiotic treatment, and reported cases demonstrating the dangers inherent in the nonsurgical concept of acute suppurative otitis media.

Nasopharynx

Serous otitis, characterized by a collection of serous fluid in middle ear spaces, is sometimes extremely difficult to diagnose, because a casual

From the Department of Otolaryngology, Washington University School of Medicine, and the Oscar Johnson Institute.

Presented at the Michigan State Medical Society annual session, Grand Rapids, Michigan, Sept. 29, 1955.

glance at the ear drum reveals it perfect, or glistening clear. This condition is more common than ever before. There is probably no increase from rise in population, but serous otitis is recognized as a complication of allergy oftener than ever before.

It is axiomatic that frequent attacks of otitis media in children are based on the presence of enlarged infected adenoids. Just as important are the same enlarged adenoids in the allergic child who shows up badly in group hearing tests in school. Ear studies are advised by the teacher and the first examination may reveal nothing. There may have been no otalgia, and by the time the ear is examined, the fluid could have vanished. If completely full of fluid, the drum picture could defy the sharpest scrutiny; on a second or third look, however, a small bubble or fluid level gives the clue to serous otitis. This cycle is frequently found to have been present for months. The treatment is incision of the drum and aspiration of its contents. No other procedure is adequate. So adenoids and allergy appear to rank all other sources of serous otitis. But a fast growing claimant may have already exceeded all other sources, and this is unresolved otitis media of infectious origin.

Before the antibiotic era, incision of the ear drum was the only certain means of treatment, and almost all acutely infected ears were treated by the otologist. With the universal use of antibiotics, most earaches subside with the general infection for which the drug is used.

The material which remains in the middle ear after quick sterilization of otitis media with antibiotics is not exactly serous fluid. It is probably sterile or liquefied pus. The effect on hearing is the same. The usual story is the patient presenting himself at the office, or even describing an earache over the phone. A large repository dose of penicillin is given by hypodermic, or oral antibiotics ordered to be taken until the patient can come for examination. The patient is promptly relieved. If adult, he reasons that the pain is gone, he is busy, and the stuffy sensation and ringing tinnitus are to be expected; if a child, the pain is gone, the temperature gone, therefore the need of further inspection is minimized. The doctor is thereby exonerated, so is the patient. The flaw really lies in the natural trend of wonder-drug medication. The problem is taken up weeks or months later, when deafness persists, and fluid is found in the ear.

The third large competitor to allergy and antibiotics for top etiological rating is the airplane. Numerically the number of ears subjected to strong negative pressure would probably exceed them all, if counted. After the plane ride, however, the patient has pain, in addition to a middle ear full of serous fluid, seeks the otologist promptly, and is promptly relieved by myringotomy. In all three types the affected ear is deaf; there is a constant ringing noise in it, and the voice roars into that side because of the Weber phenomenon. Comparison of the affected ear to the opposite side may show it perfect, the fluid behind it giving no hint of its presence except when a level or the outline of bubbles can be seen. Examination of the normal ear shows a clear bluish texture, and the serous ear has a waxy sheen; the stapedo-incal junction is not seen in the fluid ear and is clearly seen in the unaffected ear as a V-like shadow in the upper posterior half.

Nasal sprays and inflation of the eustachian tube may relieve the condition, but nothing takes the place of incision of the ear drum. Even when using antibiotics, nothing takes the place of incision for middle ear abscess, and no other single step is as important in shortening the course of infection, preventing residuals and saving the hearing. Surgical drainage here is just as important as any other spot in the body and cannot be replaced by antibiotics. Incision of the ear drum never did any harm to any ear, but neglected middle ear fluid or infection has made millions of middle-aged people deaf.

Not all problems of the nasopharynx are resolved in these classic reactions. Behind some examples of serous otitis lies the ominous chance of a malignant lesion. Many needless biopsies of the area next to the eustachian tube may be done but rewarded now and then by diagnosis of carcinoma, lymphosarcoma or even tuberculosis.

Base of Tongue

The occurrence of neurosis in a patient implies anxiety, obsessions, fears and phobias. In the list of complaints, palpitation, rapid breathing, and choking sensations are common. In milder types with less obvious mental reactions, choking, tiring of the throat and "lump" in the throat from the group of symptoms revealed to the physician. It

is usually called globus hystericus. In 1937 Saunders[8] classified the symptoms as a pharyngeal neurosis, ascribed it to spasm of the motor nerves, and stated that it is due to enlargement of the lingual tonsil, or to lingual varicosity; that the treatment is mental, with correction of the causative factor. During an era when the public is strongly admonished to report any lump for early diagnosis, these anxious patients besiege throat doctors for reassurance.

Treatment of the mental condition is psychotherapy, reassurance and sedation. Removal of lingual tonsil masses is followed by extremely severe painful reaction in the tongue and is done only on the strongest indication. However, for lingual varices, which are the commonest source of the "lump" sensation at the base of the tongue, a simple, effective treatment may be used. It consists of application of a strong solution, almost coagulating strength, of silver nitrate. The throat is anesthetized with 1 per cent pontocaine, and 25 per cent silver nitrate is applied cautiously to the lingual veins. Laryngeal spasm is rare if the curved applicator is dried before use, and the application is guided by mirror vision. The treatment is repeated monthly for a few times, after which the patient returns only at long intervals. A high percentage of anxious, neurotic patients are relieved when this is demonstrated as the origin of the "lump" sensation.

Another class of tongue symptoms is chronic soreness, vague, constant, but definitely localized to an area on the base. It is easily acceptable as chronic tonsil infection. Mirror examination shows an embossed irregular gray patch surrounding and involving the lingual tonsil structures. Biopsy reveals typical actinomycosis. It promptly improves on potassium iodide and mycostatin. Many such foci of actinomycosis are found in routine tonsil sections.

Reviewing in rapid sequence carcinoma, lymphosarcoma and plasmocytoma found on the base of the tongue, many are large before suspected. *Mirror laryngoscopy, used as routinely as the tongue depressor, will uncover many a lesion as small as the vallate papilla.* We owe this simple routine to every patient for his chance of survival.

Summarization is not important in this sweep from the nasopharynx to the base of the tongue. It is sufficient to emphasize the need of searching these areas, for lesions which are not rare or remote but common when recognized by careful examination. One glance at the base of the tongue quickly reveals a simple lingual varix or more important lesion.

A very small percentage of school children handicapped by deafness belong to nerve deafness groups which require special audiological training. The largest fraction by far are those with conductive lesions. Antibiotic treatment *with myringotomy* will remove most of the serious destructive ear infections. Antibiotic treatment *without myringotomy will contribute mastoid complications* and many examples of incompletely resolved ear abscesses to the elusive and large class of serous otitis deafness.

3720 Washington Boulevard

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One of the most important and neglected diagnostic features of the thyroid is the age of the patient. In patients under forty, any history of sudden increase in size or pressure, change or loss of voice, firmness of consistency, or fixation to surrounding tissue should be regarded as an indication for immediate surgery.

* * *

Human anatomy continues to be the biggest obstacle to the cure of cancer of the esophagus.

Out of 5,000 thyroidectomies for nodular goiter at the University of California Hospital, 300 carcinomas were found.

* * *

It has been proved that thiouracil will produce tumors in the animal thyroid.

* * *

When at all practical, surgery is the treatment of choice for thyroid cancer.

Endometriosis

By Leon S. McGoogan, M.D.
Omaha, Nebraska

Etiology

THERE are numerous theories as to the etiology of endometriosis. One theory or another may be valid in different instances. In some cases the endometriosis may arise from transplantation of the endometrium to a new area by way of retrograde peristalsis of the tubes, or by trauma such as at the time of surgery. In other cases the explanation of origin can be found in metaplasia of coelomic epithelium, growth of congenital rests, or transposition by way of the lymphatic or venous channels.

Endometriosis occurs in the reproductive age of the female, occurring usually at the age of twenty-six years or later. It is infrequent under the age of twenty-six. For some unexplainable reason, it is more common in women of the private patient status than in those of ward or clinic status. Miegs[9] states that the ratio is approximately 4.5 to 1. He has suggested that the private or well-to-do young women marry later in life, reproduce late in life and that late reproduction may be a factor in the higher frequency of disease process in the well-to-do financial group. The frequency of endometriosis in the over-all female population is not known, but in women who are subejcted to pelvic operations the incidence will vary from 17 to 35 per cent, depending upon the completeness of the observation of the pelvis, the keenness of the observer in recognizing and recording what he sees, and the diligence of the pathologist in demonstrating the pathologic process present in the tissues submitted to him.

Pathology

Any structure in the reproductive group of organs—uterus, tube and ovary—may be involved. Adjacent or distant structures such as the colon, the bladder or the appendix may be the site of the process. The abdominal wall and the umbilicus have been frequent sites of endometriosis. Gross inspection of the structures in the pelvis at the time of operation may reveal bluish to blue-black implants in the pelvis, varying in size from that of a small pin point to as large as 8 to 10 cm. in diameter. These structures are filled with a black, tarry substance. The larger endometriomata occur in the ovaries, and those in the other organs are usually less than 5 mm. in diameter. Endometriomata are subjected to, and may respond to, the various hormonal influences occurring in the female body from month to month during the period of life from menarche to menopause. The cyst-like structures enlarge from month to month. This is due to the accumulation of menstrual-like fluid which is produced by the ectopic endometrium at the time of the cyclic menstruation from the uterus. As the amount of menstrual-like material increases in quantity, the structures increase in size. They may rupture, allowing the accumulated material to pour into the peritoneal cavity and set up an inflammatory reaction, or they may rupture into another structure, one coalescing with another and producing a larger cyst-like structure. Organs or surfaces of other structures that are contiguous to the areas involved in endometriosis become adherent one to the other and at the time of operation no sharp cleavage lines are found.

Careful examination of the tissues removed at the time of surgery will show on microscopic examination endometrial-like glands, which frequently show a pattern of hormone influence resembling that of the endometrium.

Since the ectopic endometrium apparently reacts to the same hormonal influences as normal endometrium, one would pre-suppose that whatever influence might produce carcinoma of the endometrium might also under certain circumstances produce carcinoma in ectopic endometrium.

Primary carcinoma arising in ectopic endometrium in the ovary has been recently reviewed by Scott.[13] He found twelve cases in the literature and reports an additional proven case and two cases in which the origin of the cancer for an ectopic ovarian carcinoma is suggested but not proven. Two adidtional proven cases have been reported by Dockerty[3] and two more by Mancusi-

Presented at the Michigan State Medical Society annual session, Grand Rapids, September, 1955.
From the Department of Obstetrics and Gynecology, University of Nebraska College of Medicine.

Materi[8] and one by Postoloff and Rodenberg,[11] bringing the total to eighteen. Dockerty[4] reported two cases of adenocarcinoma of the recto-vaginal system probably arising from endometriosis and found five others in the literature. The total number of cancers proven to have had their origin in ectopic endometrium is twenty-five. External endometriosis can be considered to be at least as potentially capable of malignant transformation as normally located endometrium but the incidence is low.

Pregnancy can occur in the presence of endometriosis[5] and under the influence of pregnancy the ectopic endometrium undergoes decidual-like changes which resemble those occurring in the endometrium of the uterus.

Symptoms

The symptoms may vary from none at all, and sterility, to varying degrees of menstrual menometrorrhagia, dysmenorrhea, dyspareunia, backache, constipation and pelvic pressure. Numerous women are found to have evidence of pelvic endometriosis on examination but without any symptoms.

Sterility as a symptom is difficult to evaluate, but about 30 to 40 per cent of married women with endometriosis will give a history of involuntary sterility.[7] On the other hand only about 3.5 per cent of patients who have a primary complaint of sterility will be found to have endometriosis.[7]

The menstrual pattern may be altered by lengthening of the cycle, profuseness of the flow or by both. These symptoms are more likely to be present with ovarian endometriosis or with uterine adenomyosis.

Dysmenorrhea, when present, is characterized by its occurrence in the latter half of the menstrual flow and persistence after menses cessation. Dyspareunia may be the patient's only complaint, and her presence in the office is often due to the insistence of her husband rather than to the discomfort of the patient.

Diagnosis

The clinical diagnosis of endometriosis may be difficult, some authors reporting as high an error as 80 per cent. How can one reduce this percentage and improve his diagnostic acumen? If one adheres to the tubal transplantation theory of the origin of endometriosis, then the transplanted tissues should tend to find lodgment in the most dependent portion of the pelvis, that is in the cul-de-sac and adjacent areas of the uterosacral ligament. Palpation of these areas by both vaginal and rectal routes will frequently reveal nodules in the areas. These nodules are fixed, approximately pea-like or smaller in size, and painful. The ovaries may be fixed and may be enlarged and tender. The uterus may be retroverted and retroflexed and adherent as well as tender. In those uteri which are the site of an adenomyosis the uterus may be nodular or uniformly enlarged.

Direct visualization of the cul-de-sac may reveal the bluish nodules behind the cervix. Direct intra-peritoneal visualization by the peritoneoscope or by the cul-de-scope may be of great aid. Finally direct inspection at the time of surgery may reveal the cause of the patient's pelvic complaints and allow the surgeon to alter his diagnosis from the preliminary preoperative diagnosis of pelvic inflammatory disease or other suspected pathology. Unless the tissues removed are carefully examined by the pathologist, a clinical diagnosis of endometriosis may not be confirmed by the pathologic examination. Suspect tissues should be reviewed by the surgeon and the pathologist together, and by this co-operative venture there will result a higher percentage agreement of diagnosis. The reverse of course may be true, and the pathologist may present to the surgeon a diagnosis of endometriosis in tissues in which he did not expect that diagnosis.

Treatment

The non sympathomatic, minimal extent, cases of endometriosis should be observed and subjected to routine evaluation once every four to six months. Therapy of a definitive nature should be instituted only when the severity of symptoms or the extent of the disease process warrants such procedure.

Medical Therapy

Stilbestrol has been used and has been recommended by Karnaky,[6] and he reports excellent results. Preston and Campbell[12] and Creadick[2] have both used methyl-testosterone. In their cases of sterility was a primary symptom and in those cases in which the male was fertile and all other factors possibly contributing to the sterility were corrected or eliminated, 60 per cent of the patients achieved a pregnancy. If the extent of the process is great, symptoms severe or incapaci-

tating, and child bearing not a factor in the patient's future, it might be wise not to employ medical therapy but to recommend or resort to a more radical approach to the problem by the employment of surgery.

Surgery

The surgical treatment of endometriosis is generally accepted as the most prevalent therapeutic approach today. The surgeon is presented with varied and perhaps difficult problems. He should be as radical as necessary, but conservative enough to preserve the reproductive capacity of the patient. Partial resection of the ovary or ovaries should be done even if only a small portion of ovarian tissue remains. If one ovary is so badly involved that resection is impractical, and even if the other ovary is also involved, then partial resection of the remaining ovary is almost mandatory. The cortex of the ovary should be preserved, and all sutures should be of very fine catgut.

The uterosacral ligaments are frequently the seat of endometriosis. Resection of these ligaments is often not too difficult and should be done.

Retroversion, frequently due to pelvic adhesions subsequent to endometriosis, is to be corrected by a method which will correct the retroversion, not interfere with a subsequent pregnancy, and not recur following delivery. Suspension of the uterus should be a part of the operative procedure in those instances in which, in the opinion of the operator, postoperative adhesions might form and produce a retroversion. Presacral neurectomy may be indicated if the patient has dysmenorrhoea, and the pain is in the mid-line.

X-Ray Therapy

The ablation of ovarian function may be very useful in those instances in which there is recurrence following surgery or in which surgery is contraindicated or medical therapy unsuccessful.

Prognosis

In all patients subjected to surgery with the conservation of some pelvic function there is a recurrence of symptoms in about 6.9 to 9 per cent.

Reproduction is possible. Approximately 55.6 per cent[7] of all cases operated for a primary complaint of sterility will accomplish a pregnancy, although Norwood[10] recently reported that of fifty-four patients operated upon, fifty-one (94.4 per cent) became pregnant. About 30 per cent of all patients who have conservative operative procedures, regardless of whether they have a primary complaint of sterility or not and there are no other causes for sterility, become pregnant. The number of patients who become pregnant following testosterone therapy on the average is slightly greater than those subjected to conservative operative procedures, that is 60 per cent. Perhaps the mild cases of endometriosis should have medical therapy, and surgery should be reserved for those who have more severe symptoms or more extensive pelvic involvement.

As mentioned previously ectopic endometrium reacts, as all normal endometrium does, to the various hormonal changes that occur in the female from month to month, and it can undergo malignant change. The possibility must be remembered, but from a practical viewpoint the incidence is so low that the possibility of malignant change should not become a factor in deciding upon conservative or radical management.

Pregnancy can occur in the presence of endometriosis, but the incidence is infrequent and the pregnancy apparently causes a disappearance of the endometriosis process.

Summary

The incidence of endometriosis is apparently four times greater in the private patient than in the ward patient. Its attendant symptoms are sterility and from no symptoms at all to varying degrees of dysmenorrhoea, dyspareunia, backache, constipation, and meno-metrorrhagia.

Diagnosis is difficult and missed in a high percentage of patients. Few errors will occur with adequate history and pelvic examinations. In the mild cases a medical regime with stilbestrol or testosterone may be of value. Whenever surgery is performed an effort at conservative therapy with preservation of the reproductive functions should be attempted. Surgical failures, which occur in from 6 to 9 per cent of cases reported, may be treated with deep x-ray therapy.

Sterility is a symptom in about 30 to 40 per cent of the patients, but endometriosis as a factor in sterility is very low, occurring in only about 3.5 per cent of the patients with sterility problems. If all sterility factors are evaluated and the male is determined to be fertile, 60 per cent of the

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Therapeutic Abortion

By S. A. Cosgrove, M.D., F.A.C.S.
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ABORTION broadly is one of the serious problems of our national life. It is destructive of many thousands of immature human beings and is the cause of death of countless women all over the country, thus constituting what Greenhill has called one of the most dangerous operations in the whole obstetric-gynecologic field.

It is commonly considered among physicians as most regrettable and reprehensible, so that no ethical physician will engage in it in its most common and so-called criminal aspects. Many responsible and thoroughly ethical physicians, however, do employ it in a so-called "therapeutic" sense. Abortion is utilized by these men usually wholly honestly, in a manner whereby the criminal aspect of the operation is negated by the assumed necessity for it. This necessity is usually concerned with various disease conditions in the mother which occur during the pregnancy, which is interrupted. Sometimes, however, her interest is based on what are thought to be necessitous economic and social reasons.

Some years ago I became disturbed at which seemed to me to be the widespread abuse of so-called "therapeutic" abortion. So in 1944 Carter and I pointed out what we believed to be the altogether too frequent use of it generally all over the United States. In the discussion of this belief we postulated what Charles G. Child, Jr., had stated in 1931, that:

1. Physiologically, the unborn human being at any time after conception is an entity with all the life potentialities of any other creature.

From a scientific standpoint this postulate is hardly debatable. Although there is legally considerable variation as to whether the unborn human being is to be considered a specific individual, the laws of practically all of our American jurisdictions recognize the procurement of abortion in broad terms as illegal and punishable by various penalties.

2. The unborn human is entitled to the protection of those life potentialities as surely as is any other human being.

This postulate quite naturally and necessitously follows the acceptance of the first.

3. It is the duty of the medical profession to save and conserve human life. But effort to do that must not deliberately and of itself jeopardize the life of another individual, nor even the same individual.

It is upon one's concept of the truth of this postulate as to whether or not the sacrifice of one individual, that is, the fetus, is justified in order to save the life of another individual, that is, the mother. We believed then and still believe that it is not.

4. The deliberate and intentional interruption of fetal life, before the fetus is able to survive outside the uterus, is actually murder.

The statement of this postulate at the time was somewhat of a bombshell and was received with a good deal of criticism and incredulity. We were especially criticised for our use of the word "murder" in this connection. Several commentators at the time said that it was too harsh a term. Several other commentators then and since have urged that by legal definition "murder is the unlawful killing of a human being with malice aforethought, expressed or implied." One commentator says, "the distinguishing characteristic of murder is malice aforethought. Where it exists, the homicide is always murder. When it does not exist, the homicide cannot be murder, but is either manslaughter or excusable homicide." Whether or not the performance of abortion under any circumstances is attended with "malice" toward the fetus, it certainly is not characterized by any feeling of loving solicitude for the defenseless little creature. The choice of words is thereby obviously rather academic, but I am perfectly willing to change it, in the present discussion to homicide.

In the past decade, however, there have been numerous publications concerning this matter, and interest in it is still keen. There has been a rather widespread scrutiny of the necessity of ther-

Presented at the Annual Session of the Michigan State Medical Society, Grand Rapids, September, 1955.

apeutic abortion all over the country, and many commentators of eminence and authority are coming more and more to believe in the postulates which we presented eleven years ago. We further said:

Under certain very limited circumstances homicide may be excusable. These circumstances generally accept its justification only to save another life certainly and imminently in danger.

These considerations limit the justification for the homicide, which we believed "therapeutic" abortion to be, to cases in which the pregnant mother's life is certainly and imminently endangered by the existence of the fetus, and its continued growth.

Contrary to much honest medical opinion and practice at the time, but on the basis of a very wide clinical experience, we showed that such danger was extremely rare.

Further on the basis of the definitions stated, abortion is never justified for (1) remote threat to the mother's life, (2) threat to her future health, or (3) any socio-economic considerations.

Review of our clinical experience we believed showed that the natural course of even very serious disease is almost never significantly altered by pregnancy. If it is, careful medical management better meets this risk than does abortion. And abortion itself is not infrequently (about 5 per cent) directly fatal to the mother in whose supposed salvation it is used.

This direct mortality in mothers is by no means negligible. It would be considered high in almost any but the most serious types of surgery. Another phrase of Eastman's is most significant and worthy of emphatic quotation as follows: "The more urgent the physical indication for 'therapeutic' abortion, the greater the contraindication because of the hazard imposed by the operation."

Therefore, it remains for our purpose only to discuss the disease conditions in the mother which allegedly constitute an imminent threat to her life, and from which therapeutic abortion would surely and inevitably save her. In this connection, Russell very well says "the medical indications for termination of pregnancy are becoming increasingly rare. The advances in modern medical and obstetrical knowledge remove from the category of accepted indications most, or possibly all, of the complications of pregnancy. However, it is felt the approach to the problem should be through the medical aspects, the dissemination of medical knowldege, the application of advancements in medical treatment, and the institution of improved methods of evaluating cases presented for therapeutic interruption of pregnancy. The enlightened physician may then proceed with the proper scientific management of his case, usually without interrupting pregnancy, but certainly finding it unnecessary to resort to religious dogma or moral justification as the basis for his medical opinion."

I am perfectly willing to accept this fine statement as indicative of what we endeavored to propound in our original paper and at this time. Certainly we at all times have specifically ruled out religious dogma as the basis of our own belief. Just how certain fundamental moral values may be divorced from the thought and practice of us who have subscribed to the Hippocratic Oath, and who have tried to conduct our practice with the honesty of intelligence and judgment which our duty as physicians enjoins upon us all, I do not know. I very certainly do not wish to impose my own personal moral concepts on anyone else, and will freely concede that such moral aspects as enter into the matter must originate in the conscience of each individual doctor. But I must, I think, insist that each individual propound those questions which Eastman has stated and Russell has implied, rather than be too frequently misled by a mistaken and sometimes maudlin sympathy with the broad socio-economic problems of the pregnant woman. I am reminded of the breezy individual who entered my office many years ago saying, "Doctor, I want an abortion. You need not be concerned with any conscientious scruples about doing it, because I will freely accept the moral responsibility of your act." Like all physicians, I have been confronted with many pitiable situations, and undoubtedy have been many times accused of misunderstanding and lack of sympathy in meeting these problems. But as Rongy, one of the most radical commentators, said, "I have made certain of holding inviolate the dictates of conscience . . . as a practitioner of medicine."

Also I desire to warn that the individual obstetrician must be the sole judge of the dictates of his conscience, and not lend himself as a mere artificer to carry out the advice of even the best qualified men in other fields of medicine in meeting these questions. I recently had two cases of Hodgkins disease referred to me for abortion from

a clinic specializing in malignant and allied diseases because, forsooth, the regulations of their particular hospital did not permit the operation to be done there. Needless to say, those operations were not done by me nor in my hospital, and they resulted in completely successful deliveries of healthy babies without demonstrable damage to the mothers who were the victims of the disease for which the operation had been advised. Some years ago it was a matter of my knowledge that one leading obstetric clinic rather slavishly aborted patients on the say-so of the cardiologists associated with that clinic. Certainly in former years the phthisiologists were quite in the habit of insisting that obstetricians carry out their recommendations as to termination of pregnancy in women suffering from tuberculosis. Such subordination of the judgment of the man who is responsible for the life of the patient subjected to this operation should not be tolerated.

Of the most frequent conditions for which abortion has been therapeutically employed in previous years, there is almost complete agreement that hyperemesis gravidarum has ceased to justify it. I recall in my personal experience only two operations done for this indication. The first, many many years ago, did not succeed in saving the patient's life. The second resulted in recovery, but when she presented a year or two later an even more severe picture of life-threatening toxemia than she did on the occasion on which we aborted her, we withheld abortion; she recovered, carried to term, and has subsequently delivered several other children without complication.

The toxemia of pregnancy is an ever-present problem to the obstetrician. Certainly we concur with the general opinion that severe toxemia of pregnancy warrants interruption of pregnancy. However, it seldom occurs early enough in the course of pregnancy to necessitate consideration of therapeutic abortion as we have defined it, that is, termination prior to the period of utero-gestation in which the baby is at least possibly capable of surviving its intrauterine existence. When it does occur before the so-called period of viability, by careful hospitalization, and proper medical treatment, resort to this expedient may be postponed until it ceases to constitute definitive homicide in that the baby is wholly incapable of surviving it. Moreover, our own experience would not lead us to believe that a mere history of prior acute pregnancy toxemia, even in its gravest forms, justifies abortion of a succeeding pregnancy.

In the consideration of fixed hypertension antedating the pregnancy or severe hypertension arising early in the pregnancy, as well as in many other medical complications of pregnancy, it must be borne in mind that the life-expectancy of the mother is very much impaired in any case whether pregnant or not. In them the persistence of pregnancy would have little effect on the course of the disease and the same would be true of artificial interruption of the pregnancy. Hypertensive disease does apparently carry a certain few special hazards with reference to the pregnancy, but even these hazards can be appropriately met in our modern regime of prompt obstetrical operative interference, the wide availability of blood sources for transfusion, et cetera. Moreover, as Eastman points out, these women are peculiarly susceptible to death of the fetus in utero spontaneously, with its expulsion by natural mechanism without involving the risk of artificial termination and evacuation. Those patients with hypertensive disease which do not show superimposed toxemia of pregnancy as the pregnancy advances can generally be safely carried to term without artificial interference. They should, of course, be most carefully watched for evidences of the additional occurrence or superimposition of real pregnancy toxemia. Should this occur, however, as indicated above, the pregnancy may be terminated in them by the application of the same principles as applied to toxemia itself at a period of gestation beyond that which would inevitably mean the death of the fetus.

We have learned from a very wide and carefully studied experience that heart disease in pregnancy does not warrant the employment of abortion, certainly where community and hospital resources permit their adequate treatment during the course of the pregnancy. This treatment should be most careful and strict as we have elsewhere outlined. I am ready to concede that such management may be exceedingly difficult where an ideal environment does not exist, and that there may under such conditions have to be a sacrifice of the ideals which I am trying to emphasize as proper, in the management of pregnancy complicated by heart disease and other severe medical conditions. However, it must not be forgotten that these patients especially are susceptible to the immediate hazards of the operation, and that heart disease patients in whom the pregnancy is terminated early do not do nearly so well as those having heart disease complicating pregnancy under the ex-

pectant treatment which we advocate under ideal conditions. In other words, sacrifice of the ideal objective for necessitous environmental factors may be disappointing and hazardous.

There is increasing awareness that pregnancy *per se* has little effect on the natural history of pulmonary and other forms of tuberculosis. The increased resources of cure of these conditions by medical and surgical means, all applicable during pregnancy, has removed tuberculosis from the category of disease justifying abortion.

As to actual malignant diseases, these, like other medical and surgical conditions, should be treated according to medical and surgical necessity without relation to the pregnancy. Thus, malignant processes of the female genitalia may involve by extirpation or by radiation the incidental destruction of the fetus. The very serious imminence and certainty of threat of life of the mother represented by these diseases certainly constitutes justification for the destruction of the fetus if perchance that is an inevitable consequence of the surgical treatment of the malignancy. Malignancies in other parts of the body may be appropriately treated by extirpation, radiation or other means without regard to, or disturbance of the co-existing pregnancy.

Neuropsychiatric disease appears now to be in the equivocal situation that tuberculosis was only a few years ago. Many authorities in this field believe that certain diseases of the central nervous system, and especially well-defined psychiatric disease, prohibit the continuation of pregnancy in the victims of those conditions. The issue, however, is not clear-cut. I believe that the evidence indicates, as already pointed out in relation to other types of disease, that the infective and degenerative diseases of the central nervous system are not affected in their natural history by the co-existence of pregnancy, nor benefited by the termination of such pregnancy.

In regard to psychiatric states, there is a serious conflict of experience and opinion. We have ourselves seen a number of cases in which patients suffering from earlier postpartum psychoses of undoubted identity, successfully go through subsequent pregnancy without recurrence of the psychiatric disturbance. Moreover, many psychiatrists concede, and obstetric authorities like Eastman have pointed out, that the malign influence of abortion, in the form of a guilt-complex in those patients with insight enough to appreciate the meaning of the operation, is often deleterious to their subsequent psychiatric state. It is entirely possible that the risk of such psychic trauma more than offsets the problematical benefit of termination of the pregnancy in a group of diseases which, like so many others, tend to remission and recurrence and are prone to follow their own pattern no matter what particular mechanism triggers the ups and downs of their clinical course. It is highly probable that as increased therapeutic resources applicable to these diseases develop, they, like the others that I have previously discussed, will be automatically removed from the category of conditions which have heretofore been unquestioned as constituting indications for abortion.

Our own continued experience since 1944 serves to confirm our representations expressed then.

In the eleven years since then, no abortion has been performed in the hospital which I until recently directed.

Eastman suggests that if every physician confronted by this problem would answer the question conscientiously as to whether or not it seems "reasonably apparent in the patient under consideration that continuation of pregnancy will carry with it imminent danger of death or of great bodily harm," the abuse of therapeutic abortion, avowedly widespread, would be minimized. This question must also be conscientiously considered and answered by the various review boards now rather widely set up in various hospitals to determine beforehand the necessity for each therapeutic abortion.

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Program of Therapy for Repeated Abortion Patients

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FROM the earliest times articles have been written on the treatment of habitual or repeated, spontaneous abortion patients, advocating various remedies. Virtually all of the methods that have been recommended yield a successful outcome in 80 to 90 per cent of these patients. Such phenomenal percentages have been reported by numerous physicians in various parts of the world and were obtained by such diverse therapeutic methods and agents, that it suggests a common denominator for all of the various methods, namely, *the great power of the placebo.*

Twenty-five years ago, empirical antiluetic therapy was in vogue for the treatment of repeated abortion. In fact, many of the older men still use it in this country and in Europe it is highly recommended. Cross, at the Rotunda Hospital in Dublin, recently reported 90 per cent success with injections of bismuth. Not too long ago Vogt-Moller of Copenhagen used vitamin E with 85 per cent success. Recently, Javert reported from New York and recommended psychotherapy and vitamins C, P and K to prevent decidual hemorrhage, with 87 per cent success. Smith and Smith of Boston have advocated increasing doses of diethylstilbestrol, with 74 per cent success. Vaux and Rakoff have used estrogen and progesterone in Philadelphia, and Karnaky employs a combination of stilbestrol and vitamins in Houston. The literature also refers to many other time-honored methods of treatment, including thyroid extract, bedrest, sexual abstinence, et cetera. The methods recommended by these investigators seem to reflect either their geographical location or the apparent needs of their constituents. For example, the dairy industry of Denmark stimulated interest in vitamin E, the author's use of psychotherapy reflects a proximity to Park Avenue, puritanical Boston and the City of Brotherly Love seem to favor the sex hormones, while Dublin still clings to antiluetic therapy.

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Read at the Michigan Clinical Institute in Detroit, March 10, 1955.

The author has had some experience with all of these various methods and does not wish to present a detailed discussion of any of them. Instead, he wishes to discuss a method of therapy which has been evolved over a period of eighteen years, a description of which was published last year in *Obstetrics and Gynecology*. Evolution of the method continues, as can be seen from a comparison of the program outlined below with the one published last year and with that recorded in 1949.[6] The most recent change has been the addition of calcium in early pregnancy instead of during the last half of gestation, for reasons discussed elsewhere.[7]

The program to be outlined below does not emphasize any one measure or agent above the other, and the end results obtained should be evaluated in terms of the entire method and not in terms of vitamins C, P and K. For example, those using hormone therapy tend to evaluate their results in terms of the hormones to the exclusion of other established principles of treatment, such as prenatal care, vitamin capsules and bedrest. It is probable that the high percentage of success obtained with various methods is due in part to a selection of patients for the therapy. Some workers have not followed the rigid criterion of Malpas, namely, three consecutive spontaneous abortions, but include those cases with three abortions that are not consecutive, i.e., a full term pregnancy after an abortion, which is then followed by two abortions. Others, especially those writing on the use of hormone therapy, have selected some of their cases on the basis of only two consecutive abortions or one abortion and one or two stillbirths. The reason for this is obvious: habitual abortion is a rare but vexing obstetrical condition.

Definitions

Comparison of end results is often difficult because of selection of patients having been made according to different standards. The author has adhered to the rigid definition of habitual abortion, established by Malpas, namely, three consecutive abortions. He went further and divided

TABLE I

Classification of Infant	Classification of Delivery	Birth Weight Grams	Duration of Gestation in Weeks
Abortus	Abortion	0-500	0-22
Immature		501-1500	22-30
Premature	Premature	1501-2500	30-36
Full Term		2501-4000	36-40
Postmature	Term	4000 & Over	40 & Over

the cases into primary and secondary types, which has not been too practical. Other authors use only two abortions as their basis of selection, and at times these are not even consecutive.

A spontaneous abortion is defined as a pregnancy ending at or before the twenty-second week of gestation and resulting in a fetus weighing 500 grams or less.

"Primary habitual abortion" is used to classify patients who have had three or more consecutive spontaneous abortions beginning with the first pregnancy, i.e., primiparas.

"Secondary habitual abortion" designates those who have had three or more consecutive spontaneous abortions following delivery of one or more immature, premature or full term infants, i.e., multiparas.

A practical classification of infants, based on the fetal weight and the duration of gestation at the time of delivery, used by the Pediatric and Obstetrical Departments of the New York Hospital, is presented in Table I. It provides a statistical basis for tabulation of data showing the outcome of all pregnancies, *before* and *after* therapy.

Successful termination or outcome of a pregnancy is regarded as one that did not end in abortion but with the delivery of an immature, premature or full term infant, according to the above table of classification. The latter types make up the infantile mortality (exclusive of abortions). This removes the temptation to include stillbirths with the abortions when selecting the habitual abortion patient, as some investigators have done. All of us are in sympathy with her desires, as well as our own, when it comes to helping her but statistically, she should be omitted from any of the data on habitual abortion.

Incidence

Habitual abortion patients are indeed rare, although spontaneous abortion is the commonest complication of pregnancy, having an incidence of 10 per cent. The pathologic causes have been summarized by Hertig and his group in several publications. The author has also studied the pathologic aspects of 2,000 cases.[7] The incidence of primary habitual abortion has been reported[8] to be 1:300 of all the patients cared for at the New York Lying-In Hospital, while secondary habitual abortion had an incidence of 1:493. The author has just completed a pathologic study of 2,000 consecutive abortion specimens, and 104 (5.2 per cent) of the patients were habitual aborters, about equally divided between the primary and secondary types. It has been estimated that there will be 400,000 spontaneous abortions in this country in 1955, which is based on a total of 4,000,000 deliveries. Approximately 13,000 of the total number will be habitual abortion patients who will have 20,000 miscarriages in 1955. An estimated 100,000 physicians are practicing obstetrics, so that the average number of these patients cared for by any one doctor will be less than five. Even a busy obstetrician cares for only one or two of these patients per year.

The incidence of abortion in primary habitual abortion patients is 100 per cent. If 10 per cent is the usual abortion rate due to maternal or fetal pathology, then it is likely that the remaining 90 per cent of the abortions occurring in these patients is due to other causes. The psychosomatic factors can only be inferred, but experience has shown that they are very numerous and that psychologic abortions do occur.[7]

Program of Therapy

"My office foundations were shaken,
When treatment prescribed for the patient
Was approved by her doc
And took by the clock
Without further ado from relations."

The program of therapy employed by the author has been designed to cope with the three main aspects of the spontaneous abortion syndrome—the antepartum bleeding, the uterine contractions, as illustrated in Figure 1, and the anxiety and concern manifested by the patient. The current program consists of four parts: Rapport, Dietary, Psychotherapy and Some Don'ts.

Part I—Rapport

1. Preconceptional consultation (with husband). Questionnaire.
2. Examination and detection of specific medical, dental, gynecologic, mental and psychologic factors, defects and deficiencies.

3. Correction of all known factors, defects and deficiencies,—before conception.
4. Proper spacing of pregnancies.
5. Early prenatal care.

Part II—Dietary

6. Adequate diet, high in citrus fruits: 350 mgs. of vitamin C daily.
7. High calcium and iron intake. Calcium lactate and iron supplements.
8. Vitamin C, P and K supplements. Ascorbic acid, 100 mg. three times daily, or Hesperidin C*, 1 capsule two times daily each containing 100 mg. of hesperidin (vitamin P) and vitamin C. Vitamin K (Synkayvite**), 5 mg. daily.
9. Thyroid extract, only when indicated by a minus basal metabolic rate.
10. Concern for weight loss rather than for excessive gain.

Part III—Psychosomatic Therapy

11. Psychosomatic therapy:
 Frequent office visits
 Unlimited phone calls
 Group therapy
 Scrapbook of cases
 Constant encouragement
 Mutual faith
12. Sedation as needed: wine, beer, alcohol, phenobarbital. Other tranquilizing agents.
13. Dimethylane, 250 mg. three times daily, to produce relaxation of the uterus.

Part IV—Some Don'ts

14. No hot tub baths, heating pads, hot water bottles or ice caps.
15. No complete bedrest (except for threatened abortion).
16. No sex hormones (diethylstilbesterol or progesterone).
17. No vitamin E.
18. No mineral oil.
19. No abdominal girdles.
20. No empirical antiluetic therapy.
21. No coitus during entire pregnancy.

Control Data

Not infrequently, the author has been asked why he has not run a parallel or "control" series of cases, using the same program but substituting the placebos for the vitamins. This he has not done for several reasons: (1) habitual abortion patients are rare, (2) they deserve every bit as much therapeutic consideration as an arthritis patient, (3) a marked reduction in antepartum bleeding and decidual hemorrhage has been observed after using vitamins C and K, (4) these patients present themselves with the finest control data in the world, i.e., outcome of pregnancies before treatment, for comparison with results obtained *after* treatment. It is like the mile runner who runs alone and reduces his racing time from 10 minutes to 4 minutes after being trained and coached for this performance. Running the race against an opponent represents the usual method of obtaining control data.

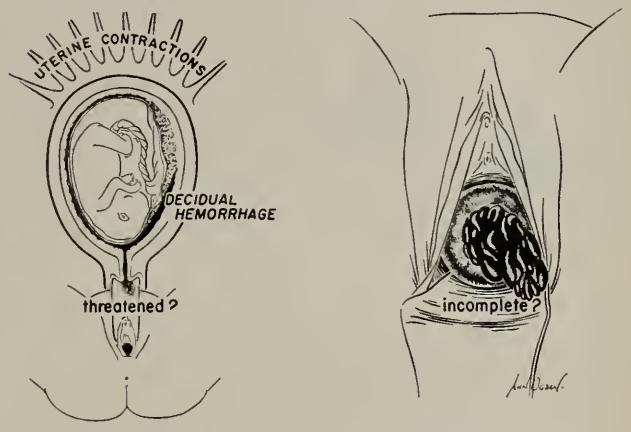


Fig. 1. Mechanism of spontaneous abortion includes decidual hemorrhage, uterine contractions, and dilatation of the cervix, in effect, a miniature labor.

Results

The results of treatment on the pregnancy outcome of 100 primary and secondary habitual abortion patients have been published elsewhere,[5] and too few additional cases have been delivered to warrant another report at this time. Premature and full-term deliveries were obtained in 87 per cent of the patients.

The real measure of success is whether a patient takes home a living infant from the hospital, and 84 per cent did so, as shown by infant mortality data discussed below.

Infant Mortality

Formerly, the total infant mortality of the New York Lying-In Hospital has been calculated on the basis of premature and full-term infants weighing 1500 grams or over (see Table I), who died in the first month of life. Infants weighing less than 1500 grams who died were classified as abortions, and those few who lived were placed in the premature group. Since 1950, the weight level has been lowered to 500 grams by Douglas, so that the premature now weighs between 500 and 2500 grams. The definition of abortion, immature, pre-

*National Drug Company
**Hoffmann-La Roche Company

mature and full term infants has been given above and in Table I.

The infant mortality rate was 3 per cent—one premature, one erythroblastosis, and one hydrocephalus. There were no fetal deaths in the infants delivered in the followup pregnancies.



Fig. 2. Psychotherapy. the psycho-somatologist at work.

Congenital Anomalies

Many of the spontaneous abortion patients have been informed by their physicians that the embryo or fetus was defective and that the abortion was, therefore, a good thing. After this happens a few times the patient begins to wonder what the outcome will be, especially if she finds herself going to term. There were only two known anomalies in 100 treated patients; one a hydrocephalus and the other an abortus with a volvulus of the small intestine.

Delivery of Repeated Pregnancies

Delivery of a habitual abortion patient of one normal, full-term infant is a special occasion. To care for her time and time again, using the same treatment, is even more gratifying. There are now twenty-two patients of the original group of 100 cases, who have been delivered more than once. Successful outcome was obtained in 85 per cent. Ironically, two patients were able to produce spontaneous abortions in five pregnancies by simply disregarding the various steps in the program. Both patients then resumed the treatment for five additional successes. Three other successful patients have requested "therapeutic abortions," after several successful confinements. This procedure was performed on another patient for hypertensive disease.

Two Consecutive Abortions

Many other investigators studying the problem of habitual abortions have used only two abortions as their criterion, and these were not necessarily consecutive. Wall and Hertig have studied the maternal and fetal pathology in a series of 100 cases with two or more abortions; eighteen had three or more. They concluded that the causes were similar to those observed in another study of 1,000 cases of spontaneous abortion. The author is about to publish a pathologic study of 104 cases (three or more) of habitual abortion in which he made similar observations.

A separate compilation was made of thirty-six cases with only two consecutive abortions, in keeping with this trend of considering patients with only two spontaneous abortions as "habitual aborters." There were twenty-six primiparas (two consecutive) and twenty multiparas (premature or full-term delivery followed by two consecutive). A few of these had up to five abortions, but since they were not consecutive they were not included in the statistics of the "true" habitual abortion cases, as defined above, but they were included in those having two consecutive abortions. These patients had been rendered no special consideration in the past and in deference to their pleas, "Why make me have three," they are now placed on the same program described above. The end results have been encouraging: the 79 per cent success was preceded by 80 per cent abortion.

Psychotherapy

The type of psychotherapy used is of the home-made variety, familiar to any family doctor. What else is a doctor who delivers babies but a family doctor? It consists of the "laying on of hands" and relieving fears and anxieties, as in Figure 2. There is more to prenatal care than taking a blood pressure and doing a urinalysis. The sciences of somatology and psychology are employed in treating the patient as a complete individual. It is begun before gestation by a series of interviews designed to detect anxieties and personality disorders. The latter were found in 19 per cent of the patients studied by Berle and Javert and the anxieties

in all of them. Some patients need to be referred for psychiatric treatment. Further pregnancies may be contraindicated.

They provide a great proving ground for the study of the effects of psychotherapy as a medical form of treatment. No greater opportunity exists in the entire field of psychiatry for a statistical analysis of the end results obtained by psychotherapy than the habitual abortion patients that go ahead with another pregnancy. Our method emphasizes the principles of mutual faith and confidence, as shown in Figure 2. To achieve it is a painstaking, time-consuming effort that few doctors are in a position to adopt. They should learn to recognize an oversized dependency and exploit it in the doctor-patient contacts.

One patient, who had three consecutive abortions, consulted an outstanding doctor in a neighboring state. She was three months along and had been staining vaginally. She spent only five minutes in his office and left with a bottle of hormone pills and a pat on the back. She was in a panic over it when we saw her. Examination revealed a large cervical erosion that was bleeding. When reassured that it was from a nonobstetrical cause, she felt greatly relieved. She was placed on the author's program, the bleeding stopped, and she was delivered at term of a normal infant.

Recently the author referred a patient to a colleague in a nearby city. She had a history of three miscarriages and preferred a doctor nearby to care for her. (This is his view of what happened, not hers or mine.) After appraising the situation, he saw her at weekly office visits. Routine blood pressure, urinalysis, et cetera, were performed. Soon the patient volunteered the information that she didn't think that she would carry this one any better than the others. The doctor promptly told her he didn't think so either. A week or so later, she expressed the same view again. Later on, at three and one-half months gestation, she voiced, again, the same disbelief. This time the doctor made a bet with her that she would lose it sooner or later! Several days later, she did abort. When the doctor told me of these events, he added, "You should know that I don't have time to fool with these characters." It was his way of telling me not to send anymore to him.

In conclusion, may I say to any physicians who contemplate, or are, caring for these patients, "If you don't have the time, don't fool with these patients."

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ALMOST ALL BABIES NOW BORN IN HOSPITALS

Twenty-five years ago, when only about three out of ten Michigan babies were born in hospitals, sixty-three of every thousand died at birth. By last year, the infant mortality rate had fallen to twenty-five per thousand. The drop in the death rate for mothers at childbirth has been even greater—from one in every 165 births in 1930 down to only one in 2,000 today. It is significant that now 99 per cent of our babies are born in hospitals. Hospital care, made widely available by Blue Cross-pioneered prepayment plans, has been a major factor in making childbirth safer and easier for both mother and child.—*BC-BS Newsletter,* March, 1956.

Simple or Nonspecific Ulceration of the Male Genitalia

By Noah E. Aronstam, M.D.
Detroit, Michigan

ASIDE from the initial lesion of syphilis and the chancroidal ulcer, there are a number of simple or nonspecific erosions affecting the genitalia. These simple lesions are quite apparent and distinguishable to the observer and cause but little difficulty in diagnosis, if the past history of the patient and the symptom-complex be taken into consideration.

As a rule the initial lesion of syphilis has preceding it a more or less prolonged period of incubation; rarely, if ever, does the primary sclerosis appear earlier than the tenth day after coitus. If there still be a doubt, a dark field will conclusively determine the character of the lesion. The chancroidal ulcer as a rule has a brief period of incubation, seldom exceeding ten days.

The varieties of nonspecific ulcer may be classified as follows: the herpetic ulcer, the gonococcic erosion, erosions of the sebaceous follicles, the traumatic abrasion or erosion, and the diabetic ulcer.

In order to complete the above classification it may not be amiss to point out two forms which, though perhaps specific in their syndromes, could not well be included in the initial two mentioned at the outset of the article, and hence belong to the latter group, viz.: balanitis erosiva circinata and the less frequent but still recognizable tubercular ulcer.

The latter two forms will be briefly touched upon in the present article.

Herpetic Ulcer

If the herpetic vesicles be unduly molested by various irritating or caustic applications, such as silver nitrate solutions, tincture of iodine, et cetera, they may rupture and become abraded. The same results, however, not infrequently occur spontaneously. Individual erosions may coalesce, giving rise to large sized ulcers. As a rule, however, herpes progenitalis manifests itself in groups, so that side by side with the ruptured vesicles we also encounter the presence of groups of herpetic lesions intact in their primary formation, a fact that greatly facilitates diagnosis. Bearing in mind the above features, the diagnosis should not be very difficult.

The treatment consists in dry dressings or the application of simple, non-irritating dusting powders, such as plain talcum powder.

Gonococcic Erosion

In the course of gonorrhea, especially so with an enlarged, elongated and constricted prepuce, the urethral discharge may erode the mucosa both of the glans and the prepuce. It is absolutely necessary to exclude the possibility of chancroidal invasion. But the history of the latter and its clinical appearance is entirely different from the former, so that mistakes are not apt to happen. Microscopically, of course, the gonococci are usually demonstrable in the former. In cases of mixed infection the Ducrey bacilli may co-exist and may be concomitantly discovered. The treatment should tend toward absolute cleanliness of the parts affected by deterging them with mild silver solutions, preferably of the viteline or peptonate group, such as solutions of Argyrol, and by giving penicillin intramuscularly.

Erosions of the Sebaceous Follicles

The genitalia are profusely supplied with sebaceous glands. Like any other part of the body containing them in abundance, they are subject to various infections, commonly of a mild or simple nature. The staphylococcus group is chiefly responsible in their causation. It is frequently met with in those who work in oil or paraffin, or do not bathe frequently. Infection takes place within the sebaceous follicles which ultimately become obstructed by a plug of central necrosis, thus giving rise to minute focal abscesses. They commonly rupture spontaneously or by added friction of the underwear, leaving behind crateriform openings. If unduly irritated by caustic applications, there may at times appear a

marginal or peripheral induration which may be taken for the primary effect of syphilis. They are independent of sexual cohabitation and their clinical history, with a little study and observation, will eventually establish their exact character. The treatment is obvious, consisting of moist dressings of Burrows solution.

Traumatic Abrasion or Erosion

Friction from rough underwear will occasionally produce minute loss of substance on the genitalia; excessive moisture of the parts caused by intertrigo and profuse perspiration in hot weather may give rise to similar results. But such lesions are very insignificant and heal kindly by the application of an ordinary dusting powder, such as plain talcum or starch. These erosions are very superficial and the diagnosis readily suggests itself to the observer. Another form of traumatic erosion is occasionally observed after coitus. It is minute loss of substance, occasions no subjective disturbances, but may be the point of entry of various infective agents. If discovered early it should be disinfected either by a 5 per cent solution of Argyrol and a dry dressing applied.

Diabetic Ulcer

Glycosuria, which frequently modifies the processes of metabolism, acting upon the various structures of the body, also exerts its influence upon the cutaneous surface in giving rise to various erosions and abrasions. One of the localities not infrequently to become affected are the genitalia.

The diabetic ulcer as a rule is quite extensive. It may assume both a serpiginous and phagedenic appearance. Unlike the chancroid it never presents the worm-eaten, undermined character; in fact, it is a clean ulcer, the base of which is raw, beefy and non-pultaceous. Its margains manifest similar characteristics. Singularly it is unilocular. Very seldom do we notice two or more lesions.

Similar to the chancroidal ulcer, this type of lesion heals with great difficulty.

The diagnosis is established only by exclusion. It is needless to say that in all ulcers of doubtful character appearing on the genitalia two main features should never leave our mind: *urinary examination* and a *blood sugar test.* The general clinical symptom-complex of the individual may likewise offer an important clue to our inquiry.

The treatment of such types of ulcers is fraught with great difficulty. Local measures do not seem to materially benefit them, hence our efforts should be directed toward the general improvement of the patient by a strict dietary regime as an underlying basis. Injections of insulin systematically employed should be tried. The application of a 2 per cent solution of Castellani's dye has in some instances proved efficacious in mitigating the ulcer; a 2 to 5 per cent Argyrol solution may be tried. The high frequency spark has also been recommended in such cases as likely to be beneficial. Exposure of the ulcer to actino-therapy may be of value. Of late the various endocrines and corton have been administered with good results in some cases. We know so little, however, about internal secretions that their specific value in these cases is merely speculative. Of course we must give them a trial in this particular disturbance of metabolism in order to test their efficacy.

Balanitis Erosiva Circinata

Bataille, of France; Corbett and Harris, of America, and the author of this article, contributing to the *Urologic and Cutaneous Review,* have firmly established the pathologic specificity of this malady. The author is pleased to say that he has been diligent in investigating the characteristics of this affection, in studying its etiology and microbiology and in giving it its proper terminology, so that today this *fourth venereal disease* stands out as a distinct morbid entity.

This affection is comparatively rare. It affects the glans and mucosa of the prepuce and is characterized by the appearance of superficial erosions, distinctly outlined against a silhouette of healthy mucous membrane. They appear one-half to one cm. in circumference, bleed readily and emit an offensive odor and a copious secretion. There is a bilateral inguinal adenopathy. These lesions are due to a symbiosis of a spirillum and vibrio, which may be detected in smears taken from the preputial secretion. If not accompanied by gangrenous changes, they heal rapidly by promptly deterging them with solutions of potassium permanganate to 1:5000, and silver protinate 0.5 to 1 per cent. Later on, when healing has progressed and epithelization is established, simple dusting powders suffice. Good results have been obtained by exposing the lesion to the actinic rays.

Tubercular Ulcer

This ulcer is a type sui generis; it is rarely encountered and the diagnosis is exceedingly difficult. Its usual sites are the glans and dorsal surfaces of the penis. *Phagedenism* is one of its main characteristics, while extension in continuity is very seldom observed. As has been remarked before, the ulcer is very deep, the margins indurated and plastic; varying amounts of pus exude from such an ulcer. Very frequently on repeated microscopic examinations the pus appears to be sterile when perhaps suddenly one may discover the tubercle bacilli. The presence of the latter is fugacious, indefinite and uncertain —a common characteristic of tubercular ulcers of other parts of the body. So called sterile pus should always arouse our suspicion as to the probability of tubercular involvement. Ulcers of this type are usually met with only during early youth, although one case came under my observation during well advanced middle age. We should always settle the question of diagnosis by serological test; a thorough inquiry into the past and family history of the patient is imperative. A Von Pirquet test is of no avail in such cases, as the reaction is invariably negative. A roentgenogram of the chest is imperative. Inoculating the pus into the peritoneal cavity of a guinea pig and subsequent study of the animal is an important factor is determining the diagnosis.

The treatment of this form of ulceration is unfortunately problematical. Radio therapy in its various modalities, such as the x-ray and the Alpine light, have been used with indifferent results. In the case mentioned above in a middle-aged man, the ulcer seemed for a time to respond to a solution of hydrogen dioxide in glycerine, but its effects were not permanent. The case drifted into other channels, and thus the ultimate outcome remains unknown.

We must never for a moment forget the possibility of malignancy becoming supplanted upon chronic ulcers, especially so when occurring in advanced middle age. It is necessary to emphasize this so as to be constantly on our guard in prolonged and intractable lesions of this type, that may be but precancerous precursors.

In conclusion, the author desires to say that the data on this subject are very meagre in medical literature, and their occasional mention here and there is not ample enough to warrant any definite conclusions on the subject.

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HOWARD CUMMINGS, M.D., HONORED

(Continued from Page 772)

greatly expanded. Many hospitals of the State are now affiliated with the University in an extern, intern and residency training program which is recognized throughout the country as a forward looking step in graduate and postgraduate medical education.

In 1910, Dr. Cummings was married to Lou Braisted, who has been a devoted, loyal and capable helpmate throughout the years. They have two children. Robert is an outstanding surgeon in Phoenix, Arizona, and Mary Lou is a noted artist in the field of medical illustration.

It has been my pleasure to know Dr. Cummings for the past twenty years, and intimately as my chief for the past ten years. His high professional standards, his kindliness and helpful disposition, his fine sense of humor, all have been a great inspiration to me.

Like many great men who are extremely busy, he still finds time to spend a few days each fall with his good friends at Camp Newton in the wonderful North country of the Upper Peninsula, and occasionally he throws a very good dry fly. His keen enjoyment of fishing is demonstrated, almost daily, during the summers at his cottage on the lake.

Dr. Cummings is held in high esteem by his colleagues at the University and St. Joseph's Mercy Hospital, the practicing physicians of the State, and thousands of loyal patients throughout the country. His kindly nature and sympathetic understanding, together with great professional ability, make him the beloved physician. Always modest and ever considerate of others, he has a host of friends wherever he goes. He has served his University and profession well, as demonstrated by the recognition which is being accorded the postgraduate medical education program at the University of Michigan, and by the tribute of this august body today.

We sincerely hope that we shall have the benefit of his counsel in clinical medicine in the fields of gynecology and in graduate and postgraduate medical education for many years to come.

Dr. Cummings, as a small token of appreciation for the many things you have done for others, it gives me great pleasure to present to you, on behalf of the Northern Tri-State Medical Association, the Distinguished Medical Citizenship Award.

Directions of Psychiatry

By Francis J. Braceland, M.D.
Hartford, Connecticut

I HAVE the temerity to discuss this subject, encompassed by such a sweeping general title, only because of the accident of being editor of an abstracting journal and also because you have elected me to several official positions which permit me to see the over-all picture of the directions of psychiatry.

Actually, no one can accurately foretell the directions of psychiatry. They are often governed by fortuitous circumstance. One change of direction of one aspect of the problem and the practitioners of the discipline are off in new directions.

Psychiatry, like all systems of thought, is influenced by the *zeitgeist,* or spirit of the times, and the age which nurtures it. This spirit is always etched into systems of ideas contemporaneous with it. The manifold features which make up the civilization of an age derive from the systems of ideas extant at the time. They are mutually interdependent. Even the physical sciences, which have changed the world and revolutionized our way of life, did not develop independent of the general spirit of the age which gave them birth and witnessed their amazing growth.

Some of the antecedent basic experiments upon which modern scientific theories and practices are founded are ages old; their implementation was delayed because the spirit of the age which contrived them did not demand experimental evidence. The general interest of these centuries was focused upon problems of a different nature. Parenthetically, it might be said that these times were concerned primarily with the problem of man, as modern civilization is puzzled by man as a problem.

I take this time to recount to you some of the cultural climate of nascent scientific thought merely to reinforce the idea that we are influenced by contemporary thought and the spirit of the times. We might go further and investigate the reasons for the preternatural delay in the appearance of a systematic body of medical psychology. Its retardation becomes quite impressive when we appreciate the fact that fundamental knowledge of the neuroses and the possibilities of their influence by psychotherapy remained an enigma even though awareness of the role of emotions in bodily disease and dysfunction had been known for centuries.

In all other fields of science, including medicine and surgery, advances have depended not only upon the progress of general knowledge but also upon the development of an adequate technology. Endoscopy is a case in point. It could not have developed until technology had progressed far enough to perfect the requisite apparatus. Contrary to general medicine, however, medical psychology for the most part developed independently. It has been the span which has bridged the gap between the natural and the social sciences. It was, however, influenced by the times which gave it birth.

To pursue this train of thought further would lead us too far afield. I shall leave it after mentioning to you a warning uttered by Oliver Wendell Holmes in his address to the graduating class at Bellevue Hospital early in this century. He warned the medical profession that doctors, like everyone else, are inevitably carried along by the currents of the times and that it behooved them to recognize the laws which govern their changing practices. The debacle of a once proud, far advanced German medicine not so long ago serves as evidence that this warning requires attention. This is the background music for the thesis which I now present to you.

General Picture

Psychiatry today occupies a unique position among medical and extra-medical disciplines. Integrated ever more closely with clinical medicine, it has provided new insights into large groups of medical problems. And because it seeks to clarify the dynamic properties of the personal and social environment and the types of processes observed between them, it has associated itself

Presented at the Michigan State Medical Society annual session, Section on Nervous and Mental Diseases, September 29, 1955.

with the social sciences and other disciplines concerned with human behavior. All of this bodes well for the progress of psychiatry. The complexity of our field dictates the wisdom of a multidisciplinary approach to the many problems that remain unsolved.

In view of the high incidence of mental illnesses and the heavy case loads borne by all of our mental hospitals, it might appear to the casual observer that we are centuries away from any real victory over these tragic and disabling afflictions. To them and to ourselves we must admit that a long hard road is still to be travelled. We must also add, however, that the progress made since the turn of the century, and especially in the last two decades, has been tremendous. Nearly two-thirds of today's first admissions to mental hospitals are discharged within a year. The annual national increment to the mental hospital population is about 10,000 patients, and this increment is largely explained by our growing population, their increased longevity, and the increased use of psychiatric facilities by the public and the medical profession. Hospitals are indeed overcrowded; but this is due for the most part to the backlog of chronic cases, many of them admitted before the advent of some of our most useful present-day psychiatric treatments.

Intensive treatment on all fronts has radically improved the recovery rates of first admissions for mental disorder, and has substantially improved the outlook for the more chronic conditions. As is true in the other branches of medicine, some of our most important therapeutic advances have come about through fortuitious discovery, and some from the fact that treatment based on faulty premises works for different reasons or in different diagnostic groups than the ones originally envisioned. (Meduna's work is an example.) For the most part, however, progress has come in the wake of arduous and unceasing clinical and experimental research.

We have learned from this research the role of the emotions in the human economy. We have achieved an understanding of man's capacity to gain knowledge of himself through dynamic procedures. We have substantiated, for mental health and mental illness, the importance of social relationships, communication and other interactions, particularly during the early years.

Research efforts in psychiatry are in broad spectrum, ranging from the pointing up of clinical data to sharper focus, to complicated biochemical and other basic scientific procedures. The strategic position long held by medical psychology for the understanding and treatment of mental disorders has not been shaken, despite the discovery of various physical agents that produce excellent symptomatic effects in the major mental illnesses. The value of psychological methods is pointed up by advances in the principles and techniques of psychiatric diagnosis, psychiatric interviewing, and individual and group psychotherapy based on findings from psychodynamic research. From a multitude of studies it is clear that psychoanalytic formulations have widely expanded the potentialities of psychiatry. The insights provided by psychoanalysis have proved enormously fruitful in elucidating the forces which mould and maintain any type of psychopathology. And as psychiatry as a whole is moving in the direction of dynamically oriented psychotherapy, both in the individual and in the group situation, psychoanalysis, or at least a good representation of it, is now working toward the development of flexible analytic techniques which will speed up such treatment and make it possible to handle more of the patients who need it.

We are moving forward also in the area of chemotherapy. New drugs are in synthesis and others are being tested. Any evidence of clinical value always sends the chemists off in new directions which eventually lead to a more active therapeutic armamentarium. The introduction of chlorpromazine is typical of the progress under way. It is true that many drugs have created intense interest in the past, only to be found wanting with the passage of time. This may be the fate of chlorpromazine and of Rauwolfia, which is also much in the forefront at the present time. While great care must be exercised before making extravagant claims, it does appear as though both these agents are potent tranquilizers. When given in adequate doses, chlorpromazine seems beneficial in patients with increased psychomotor activity from almost any cause. In the experience of some workers, severe paranoid symptoms and hallucinations have sometimes been relieved, and it has even been suggested that chlorpromazine is the precusor of psychic chemotherapy of the future. Not infrequently, reserpine has a beneficial effect in patients mentally ill for a long time, changing them from unpredictable, resistive individuals to co-operative patients who can be

approached by psychotherapeutic and rehabilitative measures. These, then, are drugs which affect mood and improve behavior to such an extent that doctors are finding it possible to take a more dynamic approach to the underlying problems, an approach which the previous intractable condition of the patient had made impossible. One other thing: the appearance of these drugs has had a therapeutic effect upon many doctors themselves. Men working in hospitals with overwhelming case loads, heretofore impotent, now find themselves with drugs which are potent, and the effect upon their own morale has been salubrious.

Resurgence of interest in biochemical theory in relation to mental disease has been accelerated by work with the hallucinogens, particularly lysergic acid and mescaline. Depending on the dosage given, lysergic acid tends to produce schizophrenic pictures or disturbances of an affective nature. Mescaline, too, produces psychotic-like experiences and behavior, and it is evident that both mescaline and lysergic acid disorganize the psychic integration of the individual. The ability to produce an experimental psychosis in normal individuals may well cast new light on the nature of the functional psychoses, and much progress is to be expected in this area as time goes on.

Thus the advent of new drugs, the rise of chemotherapy, and, in collateral fashion, the awakening of neurologists and neurophysiologists to the challenge of mental illness—an awakening marked by research on many different fronts—all point new directions for psychiatry. The efforts in progress, particularly the exciting work on stress, may pave the way for discoveries of great etiological significance.

There are, in addition, pressures in and about mental hospitals which augur well for progress. It is becoming increasingly clear, not only to the psychiatric profession, but to enlightened people in general, that most existing psychiatric institutions are obsolete. Today we are woefully handicapped by the bleak, forbidding, dysfunctional structures built long ago to isolate the mentally ill from society. These relics of the past lend themselves poorly to modern psychiatric work. The mental hospital has been aptly called an historic accident. It reflects the mores of the past much more than those of the present. These institutions were built originally to get the mentally sick out of alms houses, garrets, cellars and jails. More often than not the devoted staff working in them is handicapped by the old dictum that they should be cared for as cheaply as possible. This policy in the long run is more expensive. It is a paradox of parsimony, and with their crowding the staff is kept busy with little time to attack the problem at its source. A sharp break with tradition is in order, and future mental hospital planning must be based on the fact that the art and science of healing can be carried out only in a therapeutic community where the march of patients toward regression can be arrested. This calls for a change in the external configurations, as well as in the internal atmosphere of the mental hospital. One cannot expect to cure a patient by removing him from one abnormal environment and placing him in another.

Since the advancing frontiers of psychiatry portend great changes in the treatment of patients in the future, all new hospitals should be designed for the greatest flexibility and for ready adaptation to new arrangements and functions. Therapeutic teamwork in mental hospitals is obviously of major importance. The conditions most conducive to recovery or improvement in patients are closely related to people working in the hospital and their attitudes toward patients, individually and as a group. Personnel attitudes which contribute to a therapeutic community do not arise spontaneously; they are produced by education, training and example, and by the co-ordinated functioning of medical staff with auxiliary personnel. Attainment of such objectives, it is scarcely necessary to point out, is contingent upon adequate budgets, well structured therapeutic programs based on the needs of the individual patients, and forward-looking administrative policies which will enhance the morale of workers and patients and foster an atmosphere of therapeutic optimism.

To be a therapeutic community, the mental hospital has to be patterned on everyday life. Further than this, it needs to be an integrated part of the community it serves and should, therefore, not be relegated to some remote spot passed only on occasion by the peripatetic masses. To its usual functions, namely the care and treatment of the mentally ill, should be added educational activities, not only in the training of many more psychiatrists, psychiatric nurses and auxiliary personnel, but also in the education of other physicians in psychiatric skills and insights, and in the education of the public in the field of mental health. The mental hospital should also

be a center of research in psychiatry and should take advantage of every opportunity to contribute to medical progress. (In military psychiatry—Navy, Army—are evidences of new ideas in disheartening situations.)

The improvement of mental hospital services, their extension into the community, the research and educational activities undertaken both inside and outside the mental hospital, should bring large rewards in public education, as well as further experience and data useful for preventive psychiatry.

Prevention

Prevention of mental illness is an exceedingly complex task. It implies the control of causes. Yet in many important categories of psychiatric illness these causes are not clearly established. It seems more than probable that in almost any case of mental disorder more than one cause, indeed many more than one, is operative. Plural etiology by no means rules out the possibility of effective therapeutic work, and an attack upon one or another, or upon a combination, of the various etiological possibilities often gives spectacular relief to a severely ill patient. So, in prevention, we can work on some of the factors which we know tend to disturb the individual in his personal and social adjustment.

Sound programs of mental health can never be formulated if we spend all of our time in the diagnosis and treatment of processes already under way. Much depends on our ability to avert potential disturbances before they materialize. We must therefore have help from those who are in a position to detect the danger signs of incipient mental disorders. And of all those who are in a position to help, it is the general physician who can do the most.

Psychiatry is moving in many directions. The most rewarding, I have no doubt, will be that which integrates psychiatry with medicine and makes psychiatry an integrating influence in medicine itself. We have witnessed in the past few years the rapprochement of the psychiatrist and the general practitioner. There has been, as a result, more concerted effort to get cases of mental illness under treatment as early as possible. And psychiatry has done much to encourage the general practitioner to treat the minor manifestations of neurosis encountered in his daily practice, especially the mild anxieties and depressions that are prone to masquerade as physical illnesses. Admittedly, the general physician is not yet altogether cordial to psychiatry but his feeling is much more receptive than it was. Strauss* summarizes it nicely when he says:

> "The modern psychiatrist presents a challenge and the attitude toward him is particularly ambivalent. At the same time as he is regarded with a considerable amount of suspicion and accordingly comes in for a fair amount of ill-natured banter, he is quite confidently expected to work therapeutic miracles and in double quick time."

Advances in the field of psychiatry are having a favorable impact throughout medicine. Future progress in the cure and prevention of disease necessarily depends on medicine that is comprehensive, medicine that integrates all the data of science into a continuous body of knowledge, and medicine that has its roots in the lives and needs of patients.

Medicine is finding it more and more difficult to keep integration abreast of specialization. The scientific advances which have brought epidemic and other devastating illnesses of the past under control have changed both the outlines and the details of clinical medicine. The proliferation of knowledge has brought with it increasing departmentalization, with loss of contact not only between departments but also within the whole broad field of medicine. At the same time, a lesser part of each doctor's treatment day is now devoted to the acute conditions that used to decimate the population: and the chronic, intermittently disabling disorders are consuming more and more treatment time. The role of emotional and environmental influences in these disorders is at last receiving some of the appreciation it deserves, as is the fact that the personality of the patient can be an important curative force.

And so, after years of preoccupation with pure science, medicine is moving toward a more unitary concept in which health and disease are viewed as related expressions or phases of life adjustment. This is a concept that dictates a return to the family type of medical practice, all but abandoned in the scientific harvest of the last half-century.

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*Strauss, E. B.: Reason and unreason in psychological medicine (Croonian Lecture). Lancet, 2:49 (July 12) 1952.

Visit to European Surgical Clinics

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IN SEARCH of information about the history of thoracic surgery in Europe, I set out in April, 1955, for a two months' trip. We flew to Prestwyck, Scotland, and then went by car to Edinburgh. Our stay in Scotland was to be very short. The first evening we had tea with Mr. and Mrs. Andrew Lang. He is in charge of thoracic surgery at the university and told me of the work they were doing. Being a young man, he could not, from first hand observation, tell me of the early work in thoracic surgery done in Edinburgh.

The next morning I attended the weekly conference of the staff of the Western General Hospital, the chief hospital connected with the university. On this morning the urological staff was in charge. After a discussion of the mortality from November 28, 1954, to April 23, 1955, an interesting paper on "Bladder Tumors" was presented by Mr. W. A. T. Robb, J. M. Drennan, and Prof. R. McWhirter. There had been 105 cases of bladder tumor on the service in the last five years, and 15 per cent had survived for three or more, years. The final paper of the morning was on "The Closed Ileal Loop in Urology." In addition to the urological staff, Sir James Learmouth, the professor of surgery, was present. Many physicians in this country will remember that Sir James spent eight years at the Mayo Clinic, from 1924 to 1932, in the department of neurological surgery. After the meeting, Prof. Mercer took me to the home of the Royal College of Surgeons of Edinburgh. He is president this year, and they are celebrating their four hundredth anniversary. The main hall of the building was being redecorated, but I could see the portraits of many famous surgeons on the walls. He took me through the library and then left me with a biography of Sir William Mecewen, the great surgeon of the 19th century, who did pioneer work in thoracic surgery.

From Scotland we flew to Oslo, and there I saw Dr. Carl Semb, professor of surgery in the University and an old friend of mine. He was in this country in 1937 when he demonstrated his new technique for thoracoplasty with extrafascial apicolysis. He returned in 1949 for a shorter visit. He is well known to the thoracic surgeons throughout the world for his surgery of pulmonary tuberculosis. This year he is president of the Scandinavian Surgical Congress. Unfortunately for me he was not operating while I was in Oslo, but I did see one of his associates do a Semb apicolysis. I was most interested to see how radically it was done. Although Semb's predecessor, Holst, first carried out this operation, it was Semb who popularized it and made it known throughout the world. Semb still believes that thoracoplasty is more valuable than resection, although, of course, he does resections for certain cases. In this opinion he stood alone among the surgeons I met on my trip.

Although I have known of Semb mainly because of his work in thoracic surgery, he has continued to do general surgery and in the last few years has been interested in treating tuberculosis of the kidney by means of segmental resection, just as segmental pulmonary resections are done. In the series of eighty-seven cases he reported in 1953, the results were very good. Semb took me through the well-equipped laboratories, where he showed me work being done on studying the behavior of carbon dioxide under varying conditions. He is keenly interested in the work being done in these laboratories and gives up a definite part of his time to working there.

BCG has been in use in Norway since the early nineteen twenties, but since the war it has become compulsory for all school children and members of the armed forces. Semb believed that the definite decrease in tuberculosis morbidity and mortality has been due to its use.

From Oslo we flew to Stockholm. Dr. Clarence Crafoord, the professor of surgery in the university, was the man to see here, but unfortunately he had not returned from his trip to the United States, where I had recently seen him at a meeting. In his department of surgery at the Sabbatsberg Hospital, important contributions have been made to thoracic surgery, starting in

1935 with the manufacture of an apparatus to mechanically control respiration during anesthesia. Since then many other contributions have come, mainly dealing with the surgery of the heart and great vessels. His associate, Bjork, was also away, but Dr. Ake Senning, an able young surgeon, was in charge and kindly took care of me.

The Sabbatsberg sjukhus is an old hospital but is the chief hospital of the University of Stockholm. A new surgical building is soon to be started. The government recognizes the great value of the work done here and has been generous in its help. The operating room, in which I saw Dr. Senning operate, was a huge one, in which two operating tables may be in use at the same time. I saw Dr. Senning do a pneumonectomy while, on the other table, an abdominoperineal resection was being done. Across the back of this large room there ran a heavy wire, from which were suspended various wires, to be connected to other attachments to the patient on the operating table. Electrocardiograms and pressure readings during heart operations were obtained through these connections. The main wiring communicated with instruments in the adjacent room.

Then there were various floor connections for the anesthesia machines, so that the alternating pressure could be readily supplied. These machines are now controlled with alternating positive and negative pressure, and the whole set-up is very simple compared to the tremendous apparatus which covered an entire wall of the room in 1935. Dr. Friberg, trained under Dr. Waters in 1946, is in charge of anesthesia. He uses nitrous oxide-oxygen, curare, demerol anesthesia, and in most chest cases used the Carlens double lumen intratracheal tube. He is enthusiastic about it, and its use, in the pneumonectomy I saw, made me enthusiastic also. When the bronchus was cut across no air escaped, and the operator could leisurely close the stump.

In 1951, Engstrom, of the Sabbatsberg staff, perfected a device which can take over the respiration of a patient completely. The unit operates by direct insufflation, but differs from other respirators in delivering a constant volume of air under different pressures. All the more common ones are either time- or pressure-cycled and deliver a certain pressure. A vacuum pressure, capable of being regulated, can be applied in the airways during the expiratory phase in order that the mean mask pressure and the intrapleural pressure are kept on low values, so as not to impede the venous return and cardiac output during the insufflation breathing. This apparatus is connected with a tracheostomy tube by a cannula with a rubber cuff which fits in an absolutely airtight manner. I saw this apparatus in the operating room. It was beautifully housed in a cabinet which could be wheeled about with ease.

This device is used in the same instances in which we use the Drinker apparatus, which they consider to be entirely outmoded by theirs. They have been using it in all cases of bulbar paralysis from polio, in severely crushed chests, and in certain postoperative cases when the patient is having great trouble in spontaneous breathing. They are convinced that many lives have been saved by its use. In the other Scandinavian countries I found that they too had used this machine with great enthusiasm. In this country, in recent years, we have come to use tracheotomy more frequently, especially in bulbar paralysis from polio, but we have been slow to use it frequently in other conditions. The Swedes never hesitate to do tracheotomies and then connect their patients to this respirator.

BCG is used in Sweden as in Norway. There has been the same increase in incidence of cancer of the lung. Ninety per cent of the patients admitted to the surgical service of Crafoord are resectable. This is due to great care on the part of the referring physicians in screening the patients.

There are excellent experimental laboratories at Sabbatsberg, and I was shown the work that was being done on perfecting an extracorporeal heart. Much work of real value has come from this laboratory in recent years.

One day I went to Uppsala to see Prof. Gunnar Nystrom and the University of Uppsala Hospital. Prof. Nystrom, now retired from the University but still active in research, was in this country for six months with Blalock at Vanderbilt in 1930-1931. I had last seen him in Philadelphia in 1931, when he presented a paper before the American Surgical Association on pulmonary embolism. He operated on seventeen patients with this condition and two lived. Kirschner was the first to have success with the operation, and then Crafoord had two successful cases. Prof. Nystrom was the third person to operate successfully, and had the largest experience of all. This

subject of pulmonary embolectomy stirred the imagination of all surgeons at that time as had Cutler's first successful case of mitral valvulectomy, but since that time little attention has been given to it. The last successful case I know of was done by Valdoni of Rome in 1936.

The University of Uppsala Hospital was a fine modern one, which was the finest I saw in the Scandinavian countries. Arrangements had been made by Prof. Nystrom for me to see Prof. Olle Hulthen and to be shown through the hospital. When I reached the operating floor I was cordially greeted by several doctors. I understood that Prof. Hulthen was busy and that I could not see him until later. An attractive, younger, man took me in tow and showed me the fine new operating rooms, and the new amphitheatre. We then stopped for coffee with other members of the staff. I asked when I should be able to see Prof. Hulthen. To my great embarrassment, the "young man" who had just been escorting me around said that he was Prof. Hulthen. Dr. Paul Rudström, in charge of chest surgery, took me to his office, where I saw a fine picture of the Howard Gray family on his desk. Then Dr. Lars Thoren took me around to see the wards. They were all four-bed ones and very bright. In the corridors were mural paintings, and in the wards were framed pictures. This was true of all of the Scandinavian hospitals I saw. We left the hospital, and I was then shown the anatomy building, the amphitheater of which had been built in the 17th century as an exact model of the one in Padua where Vesalius had lectured.

At the University Hospital in Uppsala there are 200 surgical beds among a total of 900 beds. There are fourteen surgeons. Thirty-two medical students are assigned to the hospital. Medical students must spend from seven to eight years in school. They all have one year of military service. Those who wish to do surgery must spend from eight to ten years in training. Then they become chiefs of surgical services in county hospitals. The chiefs of the University Hospital are drawn from these men. Usually a man is at least fifty before he becomes eligible for the top positions. So Prof. Hulthen was not as young as he seemed to me. In the Uppsala Hospital no neurosurgery is done. These cases are all sent to Stockholm. They handle all other types of surgery. The general surgeons handle the fractures. No major surgery is done in Uppsala, or in the surrounding country, except at the University Hospital.

We flew to Copenhagen on May 8. Here the University Hospital is the Rigshospital, and Erik Husfeldt is the professor of surgery. Last November I had the good fortune to meet him in Atlantic City at the congress of the American College of Surgeons, and to see him again in Philadelphia when he received honorary fellowship in the Philadelphia Academy of Surgery on the occasion of its seventy-fifth anniversary. He was most kind to me, and I spent two mornings with him at the Rigshospital. This hospital is an old one, and the operating rooms are large enough to allow two operations to be in progress at one time. On the first occasion, I saw him repair a hiatal hernia, and met some of his staff. On the second morning he put on a real surgical show.

The first case was that of a small infant with a ventricular septal defect. The child had been having fainting spells every day. Diagnosis had been established by cardiac catherization. Hypothermia was induced, very esthetically, by covering the infant with plastic bags filled with ice cubes. The patient was on the operating table. An electric fan blew across the table, and the desired temperature of 28°C. was reached in thirty minutes. There had been no spilling of water and the patient was already in place on the operating table. Temperatures had been taken in the rectum, and in the esophagus, with electrodes connected with thermocouples. Dr. Ole Secher, the anesthetist, said that he considered the esophageal temperature to be the most exact. Prof. Frederick Therkelsen was the operator. He is in charge of the other surgical service at the Rigshospital. Dr. Husfeldt assisted. The heart was approached through a transverse incision across the sternum, and through the fourth interspaces. Control of the circulation through the vena cavae was established, the pericardium widely opened, procaine injected into the most prominent part of the atrioventricular region, and the heart opened. The defect was quickly closed with interrupted sutures of silk. Unfortunately, the heart failed to beat again.

After this operation Dr. Husfeldt repaired an atrial septal defect by his closed method of suture. The patient was a twenty-four-year-old farmer who had had increasing dyspnea on exertion. Before proceeding to the closure of the defect he carefully explored the heart through the

right auricular appendage. One's first reaction to this method of closure of a septal defect is incredulity that the closure should persist. Obviously, the encircling suture must cut through the tissue, but in doing so a reaction is set up in the tissue with resulting scar formation, and this ensures the permanent closure of the defect. Since the addition of the step of guiding the suture with a finger in the atrium, the results have been excellent.

Much was learned during an evening spent in the home of Dr. Tørning, one of the leading specialists in tuberculosis on the continent. We discussed the treatment of tuberculosis, and I was interested to find that he still uses artificial pneumothorax, and feels that the poor results others have had have been due to poor selection of cases and to poor technique. During the evening Dr. Johannes Gravesen, a pioneer in surgery for tuberculosis, joined us. He was the first man to use partial thoracoplasty, when the rest of the surgeons were still doing complete thoracoplasties regardless of the extent of the lesion. He has retired from his official positions but is still active otherwise.

Although this is a report on my visit to the surgical clinics of Europe, I think that it would be of interest to tell something about the wartime experiences of Dr. Semb and Dr. Husfeldt. The former carried on his surgical work during the German occupation of Norway until he learned that they were going to arrest him. With his family, wife and five children, he escaped to Sweden by rowboat. Once there he assumed medical charge of the large number of Norwegians who had fled to Sweden. After the liberation of Norway he became head of the health services for the country. Dr. Husfeldt did not continue his medical work but went underground. He became a leader of the Danish underground movement and near the end of the war was sent to San Francisco as a member of the Danish delegation to the meeting establishing the United Nations. For his part in the resistance movement he received many honors. When going through Elsinore palace I saw a huge new mural on the wall of one of the rooms. It was of a group of men in uniform, the leaders of the Resistance Movement. At the end was an excellent picture of Husfeldt.

Husfeldt's influence has been extended beyond the confines of Denmark. In 1950, he and Dr. Valdoni of Rome were members of a team of doctors who went to India for six months. They gave lectures and operated almost every day. In Husfeldt's clinic I met a young Indian surgeon who had been working with him for two years. He was Dr. Chatterjee from Calcutta.

Our trip to Rome was a fascinating one as we flew to Zurich, and then from Zurich flew over the Alps in beautifully clear weather, and then on over the Ligurian and Tyrhhenian seas to Rome. Soon after our arrival at our hotel Dr. Valdoni, professor of surgery in Rome, appeared to bid us welcome. I had met Dr. Valdoni last March in Detroit at the international meeting on surgery of the heart. The next day I went to the Policlinic Hospital, which is the city hospital, and the University of Rome Hospital. It is similar in size to most of our large city hospitals, though somewhat older. But being the University Hospital, it differs from our city hospitals in having fine experimental laboratories, which were as well equipped as any in this country. And their animal laboratory has been in use since Malpighi's day.

Dr. Valdoni is professor of surgery in the University, and head of the surgical services at the Policlinic. He usually operates there every day from 10:30 to 3:30 or 4:00 and does an enormous amount of operating. He works in a large room with two tables. As he finishes at one table the operation on the patient on the other table is being started. When he finishes at one table he changes his gloves, and starts to work at once at the other table. In this way he wastes no time and thus can accomplish a great deal. He is accustomed to doing a lot of operating, as he told me that in one year in Florence, before he came to Rome in 1946, he did 500 gastrectomies.

I saw Dr. Valdoni do a pneumonectomy the first day. His technique was excellent. The patient received no blood during the procedure, but at its end his pulse and blood pressure were normal. He was to receive 500 cc. of blood on return to his ward. They were always ready to give blood in the operating room, but they have so much trouble getting donors that their bank is always poorly stocked. Blood, therefore, is only given when it is considered to be necessary. Following this operation he took me on a tour of the laboratories and x-ray department. The dog kennels were very commodious and in good condition, and elsewhere the equipment was superb. The Institute of Surgical Pathology I didn't visit

but apparently it is very active. Valdoni is also head of this.

The second day, I saw Dr. Valdoni do a mitral valvulotomy with successful finger fracture of the commissures. When he cannot fracture the commissures with his finger he uses the Dogliotti ring knife, an ingenious device in which the ring has been given a cutting edge. He has used this with complete success. Following the commissurotomy he did an esophagectomy for a long standing, and undilatable, stricture of the esophagus. There are still a large number of lye strictures of the esophagus seen in Rome. He anastomosed the stomach to the proximal end of the esophagus. In cancer cases he always does an esophagojejunostomy with a Roux Y loop, as he had found that he had too many cases of esophagitis following the use of the stomach. In the stricture cases he had had no trouble with esophagitis.

In the mornings between 8:30 and 10:30 he would usually operate in a nursing home on private patients. These homes are really small private hospitals, as they have house staffs and are fully equipped. Most Italians have medical insurance and go to the Policlinic for their surgery, but there are enough Italians who can afford private medical service and who take advantage of it.

One of the most interesting experiences of my entire trip was the visit with Dr. Raffaele Bastianelli. I had spent a day with him, and watched him operate in 1927. Now, at ninety-three, he was still active but no longer operating. He had only stopped operating last year because he felt that his eyesight was not good enough. And yet, when I was with him in his office and he wanted to show me some book on his shelf, he could see as well as I. He was studying a slide under his microscope when I came into his office. He was able to tell me much of the history of thoracic surgery in Italy and promised to send me a summary of what he could find out about it (the summary has arrived). He also told me that he had been the first person to remove a mediastinal dermoid cyst. This he had done in 1893 after resection of the manubrium of the sternum. Dr. Bastianelli had his office walls lined with bookcases, and there were many books of whose existence I was in ignorance. One on the history of surgery interested me very much, as I had not known of it. It was written by Dr. Leonardo, a former student of his who now lives in this country. Dr. Bastianelli was surgeon to the royal household and came to this country to see Caruso in his fatal illness.

The Forlanini Institute, which is run by the National Institute of Social Security, is not a surgical clinic, but much surgery is done there. It was inaugurated in 1934 in honor of the Italian who first introduced the use of artificial pneumothorax in the treatment of tuberculosis. The present magnificent group of buildings houses 2,000 patients. The grounds are beautifully landscaped, and verandahs extend the length of the buildings. Each room with six beds opens on to the verandah, and there are curtains which are electrically controlled and can be raised and lowered by pressing a button. There are four floors and each one has its own dining rooms. A theater will seat almost a thousand, and moving pictures are shown at frequent intervals. The sexes are kept separate, and men and women are not allowed to attend the same performances in the theater.

I had a letter of introduction to Dr. Zorini, the head of the institute, but when I arrived he was busy and I could not see him. While waiting to see him, I was taken on a tour of the buildings by an official guide, who had learned to speak English while a prisoner of war of the English in Australia. The first rooms we saw housed the most beautiful anatomical and pathological museum I have ever seen. There were thin, translucent sections of the body in every plane, and they were standing free in the air in sealed glass jars. They have developed a process whereby the sections can be prepared and kept indefinitely in this manner. Not only were there sections of human bodies but also of various animals. It was indeed a most interesting experience.

I saw the fine modern operating rooms and the patients' rooms—where four of them shared a room—the huge kitchen and the main dining hall for ambulatory patients. The department which most interested me was one that had been established by Dr. Zorini and in which he was particularly interested. This was the rehabilitation unit through which every patient must pass before being discharged. Every patient within a year of being discharged is given aptitude tests. They are then assigned to work in the departments for which their tests have shown they have an aptitude. I saw large groups of patients learning typing, others were working in an

electrical shop, some were doing bookbinding, and a great many were sewing. All of these patients had the chance to equip themselves to earn a living on leaving the institute.

Finally I did see Dr. Zorini and had a most interesting talk with him. In Italy BCG has not been used, and yet there has been a definite decrease in their morbidity and mortality figures. In the institute both collapse measures, and resections are done by their staff surgeons.

Our next stop was Vienna, and I looked forward very eagerly to this visit, as I had spent a week there in 1927 and had had two interesting days at the Allgemeine Krankenhaus. Unfortunately, the timing of this visit was bad, as Prof. Wolfgang Denk, the emeritus chief of the Second Surgical Service, was leaving town for meetings elsewhere. He stayed over a short time, and I had a delightful hour with him in his office before he left. His office was the one used by Billroth, and on its walls were portraits of Billroth and of Denk. In the room also was the specimen of the segment of stomach which Billroth had removed in 1881. It was a pylorectomy for cancer, and the patient had died from liver metastases three months later. This was the first gastric resection to be successful.

Prof. Denk told me that he had been Von Eiselberg's assistant from 1908 to 1924 and had started his surgical practice in 1907. He was a pioneer in thoracic surgery. In 1911 he did a Délorme decortication for empyema, just as we do them today. In the same year he did his first thoracoplasty. In 1917 he did an extrapleural pneumolysis and in 1920 did a partial thoracoplasty. He has been especially interested in tuberculosis and in cancer of the lung. His ideas about the increasing incidence, and the relationship between it and cigarette smoking, are similar to the ideas of most of the surgeons in this country. A wonderful opportunity to study the effect of cigarette smoking on the incidence of cancer of the lung had been created by Hitler but could not be taken advantage of because of failure to keep statistics. When Hitler took over Austria, tobacco was a state monopoly. He, therefore, spread the word that anyone who smoked cigarettes was disloyal to him, and their use markedly decreased. With the end of the war cigarette smoking was resumed in the old pattern. Very valuable information might have been obtained had careful statistics been kept. In regard to their cancer cases he said that only 20 to 25 per cent were resectable. The types of cases they receive on their service are comparable to those admitted to our city hospital services.

Prof. Denk's successor is Dr. Salzer, but he too was going with Prof. Denk to the medical meetings. However, Dr. Jenny, who is in charge of thoracic surgery, exclusive of the heart, was present and took me in charge after Prof. Denk left. The first surgical service of the University of Vienna is housed in the Allgemeine Krankenhaus, whereas the second, or Billroth, service is housed in buildings across the street. The buildings are old but in good repair. The operating rooms are huge, and the one used by Billroth is still in use. In it, two operating tables are usually in use. The wards are like the large old ones in our hospitals. I saw Dr. Jenny do a lobectomy with excellent technique, and I had an interesting talk with one of the anesthetists. She was Dr. Edith Simandl and had been trained in this country under Dr. Collins in Iowa, but had also spent some time under Dr. Waters and Dr. Beecher. In this clinic no ether was used for chest cases. The same combination of agents seen in use in the other clinics I had visited were used here. She felt very strongly that ether should never be used in chest cases. Unfortunately, Dr. Steinhardt, who is in charge of cardiac surgery, was not available, so I saw none of this work.

In Munich I had an interesting morning at the University Hospital. Dr. Emil Karl Frey is the professor of surgery and, as a former assistant of Sauerbruch's, has followed in his chief's footsteps. Sauerbruch spent important years in Munich, and a marble bust of him stands in the hallway near the operating room in which he used to operate. The hospital was badly damaged during the war, but the main operating room was not hit. The hospital has been rebuilt almost exactly as it was. The operating rooms I saw were huge ones, and in one I saw a pneumonectomy and a plastic operation being done, while in the next one, the professor was doing a cholecystectomy. Dr. Keutgen, the head of the thoracic surgical unit, took me on rounds. He has forty beds on his service and they are kept filled. The rooms I saw had two, and four beds in them. The beds had metal strips running overhead the length of the bed, from which were suspended stirrups which the patients could use to help them move about.

I had an interesting talk with Prof. Frey and Dr. Keutgen. They told me that about 95 per cent of the people had medical and surgical insurance, and that most of them took advantage of it. The rates were established many years ago and are fantastic in regard to certain operations. As the fee for thyroidectomy was set when nothing more than the removal of a small section of the gland was done, the fee for thyroidectomy is $3.44, while that for appendectomy is $7.14. It is obvious that no one could live on such fees, so fortunately there are enough private patients to make up the difference. As in all German, Austrian and Swiss university hospitals, the only member of the staff who can have private patients in the University Hospital is the professor of surgery.

Medical schools in Germany are open to all students who can qualify. They must have four years of elementary school and nine years in the gymnasium. This gives them an education comparable to our high school plus one year of college. In medical school they spend six years. During the first two and a half years they do no work in the hospital, except that they are allowed to serve as orderlies during their vacations. In the second two and a half years, they serve as clinical clerks in the hospital. They then have one year as interns, but in order to practice they must spend one more year in the hospital. To qualify as a surgeon they must spend one more year in medicine, and then five years in surgery. One of these five years may be spent in gynecology.

In Germany, as in Austria and Switzerland, no person will have an operation done except by a qualified surgeon. There is no law about this, but through the years the people have learned the importance of such a plan. There is no question of the patient going to some untrained physician because his fees would be less. If they can't afford the surgeon of their choice, they can be assured of the finest surgery in one of the city hospitals, as is true in this country.

My introduction to Swiss surgery was a most pleasant one. Thanks to Dr. Paul Holinger of Chicago, when we went to Davos, Dr. and Mrs. Hans Iselin met us at the hotel. He is a bronchoesophogologist who had his training under Dr. Holinger after the war. While he took me around to see the tuberculosis sanatoria, Mrs. Iselin entertained my wife. We went first to the sanatorium run by the Dutch government. Here there was a physiological laboratory under the direction of Dr. Scherrer of Vienna, where all of the patients in Davos who were to have chest operations had their pulmonary reserve studied. The laboratory has been in existence only two and a half years but has proven its worth. He studies their vital capacity first; then residual air is determined, arterial oxygen, and CO_2; and finally bronchospirometry is done. Of 197 patients studied in this laboratory, 183 were found to have adequate reserve. Of the fourteen who were found to have inadequate respiratory reserve, but who were operated upon, eight died of cardiorespiratory failure. None of the others with adequate reserve had such an ending. After a tour of the laboratory Dr. Iselin showed me some bronchograms which he had made with water soluble Dionosyl. They were beautiful. He is enthusiastic about its value because of the ease with which the material can be moved about in the bronchi for some time after its introduction, so that under the fluoroscope the bronchi in which he is most interested can be selectively filled.

Davos was one of the first places in the world to have tuberculosis sanatoria, and people from all over the world have continued to come there. As the governments have taken over more of the control of tuberculosis, and people have been able to get free sanatorium care near home, the need for private sanatoria has markedly decreased. However, Davos is such a beautiful place, and so famous for its ski slopes, that it is still a mecca for ski enthusiasts as well as for people with tuberculosis. I saw the sanatorium made famous by Thomas Mann's book "The Magic Mountain." In those days the big sanatoria were more like large resort hotels, but today they are like the sanatoria elsewhere in the world. In 1934, Dr. Jessen, the leading thoracic surgeon of that time in Switzerland, was the guest speaker at the meeting of the American Association for Thoracic Surgery. He had been the model for the doctor in the "Magic Mountain," and I was most interested to meet him. He came over at about the same time as did Thomas Mann, and when I talked to him about the "Magic Mountain," he said that he thought more people in this country had read the book than in Europe.

That evening we had dinner with the Iselins and Dr. and Mrs. Felix Suter. Dr. Suter is the only surgeon in Davos who does major chest surgery, and he limits himself to surgery of the lungs and pleura. All other cases must be sent else-

where. He has a sanatorium of his own but does pulmonary surgery for all of the sanatoria. He still uses a lot of extrapleural pneumothorax and is enthusiastic about it. He continues to do thoracoplasties, but they are exceeded by the number of pulmonary resections. I was interested to hear him say that he gives PAS entirely by the intravenous route. He gives 24 gm. a day, and combines it with streptomycin, or with isoniasid. He gives 0.5 gm. of streptomycin a day for six-plus months before operation, and for two to three months afterwards.

After the visit to Davos I spent a pleasant morning in Lausanne with Dr. Naef, who had had his training in chest surgery under Overholt. I had met him in Boston and had just seen him at the meeting of the American Association for Thoracic Surgery in Atlantic City in April. He was operating in a small private hospital and did a difficult lobectomy with credit to his teacher. He was assisted in the operation by Dr. Carmine who had his training at the Massachusetts General Hospital. Naef is one of the pioneers in cardiac surgery in Switzerland, and is a member of the French society for thoracic surgeons.

In Basel I had a most interesting visit with Dr. Nissen, who has been professor of surgery there since 1950. I had known of him for most of my professional life, because of his own important contributions, but also because he was Sauerbruch's chief assistant for many years. He had left Hitler Germany in 1933 to become professor of surgery in Turkey. There he stayed until he came on a sabbatical leave to this country. He was in Boston when we entered the war, and as he had only a German passport, he was interned. He later went to New York, where he was able to practice surgery.

The Canton hospital, which is the University Hospital, is a large modern one with buildings forming three sides of a quadrangle, and with a beautiful lawn and garden in the center of the buildings. The first afternoon I had a chance to talk with Dr. Nissen in his office. He told me that the supposed autobiography of Sauerbruch's, which I had read, was not written by Sauerbruch but by a newspaper man. Sauerbruch had a stroke in 1950 and for the last two years of his life was entirely *non compos mentis*. Nissen felt that the book painted an erroneous picture of Sauerbruch. He felt that Sauerbruch was truly a great man. He said that Sauerbruch had remained anti-Hitler throughout the war. Although Sauerbruch's reputation was high, and he was known to everyone interested in chest surgery in this country, he was not popular, as he had never been cordial to the Americans who came to his clinic after the first World War.

The next morning I went to the hospital to see Nissen operate. He had a most difficult pneumonectomy in a patient with an old tuberculous empyema and atelectatic lung. He showed his ability by getting into severe difficulty and then completing the operation perfectly. Following this, he took me into the large amphitheater where he was to give a clinic to the third-year medical students. He said that they liked to see foreign doctors. So, after he was received with applause, he introduced me, and I spoke, in English, for a short while. I told them how much we admired Swiss surgery, and how fortunate I thought they were to have such a distinguished doctor as their professor. The amphitheatre was interesting because there were large portraits of the great Swiss surgeons on the wall. He pointed out to me the portraits of Kocher, Courvoisier, and others.

From Dr. Nissen and Dr. Naef I learned something of medical education and surgical registration in Switzerland. Anyone who is qualified may enter a medical school in Switzerland. They must have the same qualifications as noted for Germany and Austria. They spend six years in school and then spend a year as interns before they can qualify to practice. To become a surgeon one must spend a number of years in training. They are certified as surgeons, as we do in this country. Their board of surgery is made up of four men chosen from the Association of Swiss Physicians. Two other men, appointed by the Congress of the Republic, upon the recommendation of the President, act as a board of appeals. If a man is turned down by the regular board, he may appeal his case to this board, but it rarely reverses the decision of the regular board. Among the Swiss medical societies are: the Association of Swiss Physicians, the Swiss Academy of Medical Scientists, Association of Medical Institutes, and the Société Swiss de Chirurgie. Any qualified surgeon must be elected to membership in this last society if he is proposed by two members.

In going to Paris I particularly wanted to see Dr. Réné Leriche, as he is one of the few men remaining who knew the great French surgeon

Tuffier. I wrote to him and was fortunate enough to find him in Paris. He has retired from active practice and spends much time on the Riviera. I went to see him in his office. To the maid who admitted me to the apartment I gave the letter that Dr. Leriche had written to me saying that he would like to see me. I was shown into a large polygonal room beautifully furnished, and with fine paintings and tapestries on the walls. There was a fine Gauguin, but I did not recognize the others. After some time Dr. Leriche appeared and took me into his office. Here again were many paintings but what struck my eye was a wonderful photograph of Dr. Harvey Cushing. It was an enlargement of a snapshot taken in Switzerland when Dr. Cushing was still in his prime. As Dr. Leriche would speak only French, our conversation was not entirely satisfactory. I did learn, however, that he considered the contributions of Roux Berger of Lyons to be the most important ones on the surgery of war wounds of the chest. They were published after the first World War. He had little to say of Tuffier, but later I was fortunate enough to have a talk with Dr. Marc Iselin, whose father had been associated with Tuffier during the first World War. He told me some interesting facts about his personality.

Thanks to Dr. Churchill and to Mr. Allison of Leeds, I had gotten in touch with Dr. Jean Mathey before going to Paris. He was very kind to me, and I had the pleasure of seeing him operate one morning. He operated in the Hospital des Malades Enfants with the most interesting operating room I saw anywhere in Europe. The operating table was illuminated by light reflected from the end wall of the room, against which a great beam of light was directed. The operation was repair of an atrial septal defect under hypothermia. The operation was beautifully done, but at the end the heart would not beat. At autopsy, it was seen that the pulmonary veins all emptied into the vena cava. Anesthesia for this operation was given by a woman who was one of the leading anesthesiologists in Paris. Most of these specialists in Paris are women. After this operation we went out to the Roses d'Hay tuberculosis sanatorium where Mathey does the surgery. All patients who are to have pulmonary resections have bronchograms and most also have bronchographic tomograms, to detect small defects that do not show up in the conventional bronchograms. I was much impressed with the bronchograms I saw. This sanatorium is run by an insurance company, and all of the patients are policyholders. There was a resident staff, and the buildings and equipment were modern and in good condition. Mathey does the surgery, and said that they did about nine resections to every thoracoplasty. He took with him to the sanatorium the anesthetist who had given the anesthesia for the heart operation. She had been trained in England.

In discussing the problem of carcinoma of the lung with Mathey, he said that the same increase in incidence had been noted in Paris as elsewhere. He, however, has patients referred to him by men who are most careful in their studies. Last year he was able to do resections in forty consecutive cases, a record that I would not have believed could be possible. In general, he said that he was able to do resections in 90 per cent of the cases referred to him. I did not ask any of the other surgeons about their resectability rates.

The next day I went to see Dr. Dubost operate at the Hospital Marie Lannelongue, which is devoted entirely to thoracic surgery and is a city hospital. It was a modern building in every respect. Dubost was to do a repair of an atrial septal defect in a young man. He produced hypothermia by immersing him in a tub of ice water. I was not able to stay to see the procedure as it was the day I had an appointment with Dr. Leriche. He repaired the defect, but the heart continued to beat at a very rapid rate and the patient died some five hours after the operation. While I was waiting for the hypothermia to be produced, I had an interesting talk with one of the two physiologists attached to the hospital. He had spent two years in Minneapolis with Varco and Lillihei and goes back there again this year. He was Dr. Nanas, and I found that he was very much interested in medical education in France and had written an article on the subject for our *American Journal of Medical Education.*

At the Broussais Hospital the next day I saw Dr. Dubost do a mitral valvulotomy. The commissures could not be split with the finger. He used his little finger as his fingers are large, and he finds that the little one works best for him. Finding that his finger would not suffice, he introduced a dilator, similar to the Bailey aortic valve dilator, and quickly and easily split the commissures. He said that he had never had a failure with this method. At this hospital Prof. d'Allaine

is the chief of the service, and Dubost does all the cardiovascular surgery.

On my last afternoon in Paris Dr. Mathey took me, with a group of doctors, to meet Prof. Binet, the dean of the Faculty of Medicine of the University of Paris. We had a pleasant conversation and then we were sent through the medical museum. This was a most interesting experience. There were photographs, manuscripts and instruments dating back to the 16th century. Many of Ambrose Pare's instruments were on display. There was an anatomy, with a tremendous number of illustrations by Albrecht Durer. And then I saw an instrument, dating from the early eighteenth century, which had been used to keep lithotomy wounds open. It closely resembled the instrument I had seen Dubost use in dilating the mitral valve. The mechanisms for producing the dilating force were identically alike. From the museum we went to the library. It was larger than any library I had seen in this country, aside from the Library of Congress. The librarian, Mr. Hahn, was the third generation of his family to have held this important post. Before taking us on a tour of the place he showed us a book that had been kept by the deans of the medical faculty since its founding. On the first page was the date 1399, and then a page in longhand by the dean, recording the important events of the year. Except for the years of the Revolution this book had been kept up continuously. We then were taken on a tour of the library, which seemed very modern. I do not remember the huge number of people who used the library every day but it is obviously in great use.

My first morning in London was spent at the Brompton Hospital, where I watched Sir Russell Brock operate on a patient with both mitral and aortic stenosis. The auricular appendage was full of clots, and these were curetted out with a clamp across the base of the auricle. Before opening the auricle itself he occluded the carotids and pulmonary veins, then flushed out the auricle, and reapplied his clamp. He then inserted his finger through the appendage and explored the valve. He found that he could not split the commissures with his finger. He made a small incision in the left ventricle and inserted through it an aortic valve dilator like the one used in Paris by Dubost. Although he had his right index finger in the upper part of the valve, and thus could more accurately guide the instrument into the valve, he was unable to split the commissures. Therefore he removed the instrument and closed the ventricular wound. Then he put a ring on his index finger and placed under it the end of a long handled knife. This knife resembled a tenotome. With it he was able to cut the commissures. Having succeeded in correcting the mitral stenosis, he proceeded to attack the aortic valve. This he did by incising the ventricle again and inserting through this wound the aortic valve dilator. He succeeded in appreciably enlarging the valve as was shown by the change in the pressure differential. Pressure readings were taken from the ventricle and the aorta. The needles were attached to plastic tubes which ran to a manometer on an adjacent table. The apparatus was so arranged that the tubing could be flushed at will with heparin and NSS.

The Brompton Hospital is one of the older ones in London and for a long time has been devoted exclusively to the care of chest cases. Many famous names in surgery have been connected with it. Two days after the operation just described, I saw Sir Russell operate again. This time he was operating on a patient with atrial septal defect, and doing it under hypothermia. I had heard him discuss his method for inducing hypothermia at the meeting in Detroit in March, and had been so much impressed with its value that I had asked him to demonstrate it for me when I came to London.

The patient was a twelve-year-old boy who had had a complete heart block for years but had little in the way of symptoms. First Brock explored the heart through the right atrial appendage, after having exposed it through a transverse incision across the sternum and into the fourth interspaces. The diagnosis of septal defect had been made by means of cardiac catheterization, and it was thought that he might have an anomalous arrangement of the pulmonary veins. No other abnormality was found, so cannulae were brought into the atrium through the appendage, and run into the vena cavae. The tubing connecting with the cannulae ran through a cooling apparatus. For forty-five minutes the blood was allowed to so circulate before the temperature fell to 28° C. The rate of cooling was carefully followed by Brock, who insisted on the temperatures being given to him every five minutes. The temperatures were taken from the rectum, from the pharynx and also from the chest wall. As the heart was

filled with cold blood, temperatures from the esophagus would be of no value. After the temperature had been at 28° C for ten minutes he started operating again. He feels that it is important to wait for awhile after the desired temperature has been reached before operating, so as to allow the temperature of the brain to fall to the level of the other places. He believes that the brain's temperature does not fall as fast as other parts of the body and thinks that one of his fatalities had been due to his operating too soon after the desired body temperature had been reached.

After removing the cannulae, he temporarily closed the wound in the appendage and then placed around the vena cavae and right pulmonary veins small rubber tubes. The aorta and pulmonary artery were isolated enough so that later a clamp could be readily placed across them. An incision was made in the auricle above a clamp, all great vessels were then occluded, the clamp removed and the atrial defect exposed. It was quickly closed with continuous suture, and the auricle clamped. The heart began to beat again with normal rhythm. The great vessels were then freed of their occluding clamps and tourniquets, and the blood flow re-established. The total time of occlusion was five and a half minutes. The order of removal of the occlusions was: first the superior vena cava, then the inferior vena cava, then the pulmonary veins, pulmonary artery, and finally the aorta. The wound in the auricle was closed, and then the cannulae reintroduced. Now the blood was allowed to flow through a warming system. This was continued until the temperature had risen to 35° and the cannulae were removed and the wound closed. At the end of the operation the patient was speaking and was in fine condition.

Between my visits to the Brompton Hospital, I went to St. Bartholomew's. There I saw Sir James Paterson Ross, the director of the surgical service, but he was doing no chest surgery that day, so I talked with him between operations. Sir James then arranged for me to see something of the hospital. He turned me over to Mr. C. H. Chamier, who apparently was an authority on the hospital. I had been so greatly impressed by the antiquity of the Dean's book which had been shown me in Paris that I did not expect to find anything equally old in England. Imagine then my surprise when I was told the story of the founding of St. Bartholomew's. A musician of the King of England, Henry I, had gone on a pilgrimage to Rome. On the way he had fallen ill and expected to die. He made a pledge to God that should he recover he would erect a hospital for the sick poor in London. He then had a dream and St. Bartholomew appeared to him and said that he should build the hospital. In Rome he received the Pope's permission to build the hospital. Returning to London, he secured the permission of the King, who gave him land in Smithfield, where were the Royal market, and the execution grounds for criminals. Rahere was appointed the Pryor, and an order of Augustinian monks was established. The hospital was built after a church had been erected and was chartered in 1123. In the present chapel on the hospital grounds is a portion of the original church tower. When Henry VIII took over the church in England in 1536, he took over all of the church holdings, and St. Bartholomew's lost its charter. However, the citizens of London petitioned the King, and the charter was restored. It was the only hospital so chartered and is therefore the only one of the medieval insttiutions to have continued down to the present day. The only part of the original building is the church tower referred to above. Buildings have been added throughout the centuries, and since the last war a modern surgical building had been erected. It is now a truly modern institution and ranks high among the hospitals in England. Its medical school is a part of the University of London.

My last visit to a surgical clinic was to go to Leeds to see Mr. Phillip Allison. Although he is now Nuffield Professor of Surgery at Oxford, he is still at Leeds, awaiting the building of a hospital at Oxford. I had had the good fortune to meet him in Atlantic City last November at the meeting of the American College of Surgeons. He was made an Honorary Fellow of the College in Leeds in the preceding summer. Allison is particularly well known because of his writings on surgery of the esophagus, especially in regard to hiatal hernia, and to the use of the Roux Y loop for esophagojejunostomy after esophagectomy. More recently he has been obtaining pressures within the left auricle, pulmonary artery and aorta through the bronchoscope. When I saw him in June he had done two hundred such determinations without an unpleasant incident.

Leeds, an industrial city of more than half a million, is perhaps best known to surgeons in this

country because it was there that Lord Moynihan lived and worked. Even after he had achieved such great reputation he continued to live in Leeds, although he had a consulting office in Harley Street. He was director of surgery at the Royal Infirmary, and it was there that I saw Mr. Allison operate. He took me around the hospital a bit. It was large, and in fine condtion, but I saw no modern building. In addition to the large public hospital there is a private wing, which I did not see. This must correspond to the Brooks House at the M.G.H. Mr. Allison has twenty-nine beds for thoracic surgical patients in the main hospital. He is allowed to keep all of the records of these patients and all of their x-rays in the office attached to this section. His secretary has charge of the records and x-rays. Elsewhere in the hospital the records all go to the central record room, and the x-rays to the x-ray department. The Royal Infirmary is the chief hospital for the University of Leeds.

I was particularly interested in his esophageal work and had asked him to arrange to do an esophagectomy for me. He had a patient with chronic esophagitis and an intractable stricture. Through an abdominothoracic incision he explored the chest and then proceeded to prepare his loop of jejunum. After this he freed the esophagus from a point just below the arch of the aorta down to the cardia. It was then resected and an anastomosis made between the proximal esophagus and the jejunal segment. This had been prepared as a Roux Y loop. Allison has been using the jejunum rather than the stomach after all esophagectomies for several years now, and he is convinced that it is a much better procedure. He has had no instances of esophagitis after using the jejunum, whereas before, when using the stomach, a certain percentage of the cases did develop esophagitis. Using this technique requires a much longer time, and the preparation of the jejunal loop requires the most meticulous technique. This patient had gastric mucosa extending high into the esophagus, and it was ulceration of this tissue that had caused the trouble. Most writers and most surgeons speak of this condition as a short esophagus. Barrett, of London, sometime ago showed that the condition commonly called short esophagus was really only an esophagus with gastric mucosa extending up its lumen for a variable distance. The gastric mucosa in this ectopic position is more vulnerable than in the stomach, and hence is the site of chronic inflammation. Allison has strongly supported Mr. Barrett in this contention.

Medical education in England is similar to that on the continent except that its medical schools are not open to all who are qualified. They select their students, as we do. The requirements for admission are similar to those on the continent, and to our own. After finishing medical school and their year of internship, they are qualified to practice. Those who wish to become internists take at least two more years of medical internship, then present a thesis, and if successful are given the degree of Doctor of Medicine. Men who wish to become surgeons do not take the years of medical internship, nor prepare a thesis, and do not receive the degree of Doctor of Medicine. Therefore the surgeons are not called doctors. It is true that the custom of calling surgeons Mister, instead of Doctor, goes back to the middle ages, and to the time when there were only barber surgeons. But even then several years of apprenticeship were required of the candidates before they were allowed to practice surgery. So, although the surgeons do not acquire the title of M.D., and are called Mister, they have always been required to prepare for many years before being allowed to practice surgery.

And so ended my medical excursions. I had seen the best surgery in each country I had visited. I had seen only the cream, and so am in no position to judge the quality of medical service, or of surgery, in the countries I visited. I had really only visited the university centers, and they were comparable to our best.

If many tumors of a rare type or unusual site occur in a restricted population having in common some peculiar racial custom or environmental factor, the etiology may be deduced by statistical methods and verified experimentally.

Aminopterin (4-aminopteroylglutamic acid), the amino acid analogue of folic acid, is especially useful in treating children and young adults with acute leukemia. It is of little or no value in patients over thirty years old.

Analysis of Anesthesia Problems

By Roy O. Webb, M.D.
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THE problems of anesthesia are many and varied. Some are more or less limited to the field of anesthesiology. Some are common to other branches of medicine. Others are common to the various components of our worldly culture. It is within the scope of anesthesiology to cope with a few of these problems. Co-operation from other branches of medicine is necessary to correct some. Various fields of endeavor must co-operate to correct the others.

These problems may be classified as follows: (1) psychic, (2) technical, (3) ethical, (4) professional, (5) traditional, (6) economic.

1. Psychic problems refer mainly to fears, emotions, fanatical beliefs and superstitions on the part of patients.

2. Technical problems involve pre-anesthetic, anesthetic and post-anesthetic management of patients; care and use of equipment; and knowledge of agent and method.

3. Ethical problems involve conforming to legal statutes and practicing the art and science of anesthesia in accordance with the constitution and by-laws of state and national professional societies. These three categories could well be solved by the anesthesiologists if unhampered by influences outside their own sphere.

4. Through the ages most branches of medicine have endeavored to maintain an adequate and amiable patient-doctor relationship. The anesthesiologist, however, must maintain a satisfactory doctor-patient-doctor-hospital relationship. Failure of other branches of medicine to fully realize this difference of professional relationships often leads to problematical misunderstandings.

5. Traditions are a persistence of former practices and customs. In the evolution of anesthesiology from the discovery of chloroform in 1831 and the demonstration of the use of ether as an anesthetic agent in 1846, many changes have taken place. From the early use of these two agents as analgesics in home deliveries, the administration of anesthesia became known as a woman's job. Thus, in its later use in surgical procedures, its administration was delegated to nurses. Hospitals then employed nurses as anesthetists and charged patients an individual fee for anesthesia.

Later, doctors became interested in the administration of anesthetics. This came about shortly after general surgery began to develop as a specialty. The referring physician, usually a general practitioner, administered the anesthetic and this custom prevailed for a number of years. Then, some few physicians became interested in developing anesthesia to a point where surgery could progress to operative fields heretofore inaccessible. With this development came the development of the surgical specialties, and anesthesiology was considered one of the surgical specialties. Anesthesiology has now developed into a specialty within itself. However, many hospitals are reluctant to give up their nurse anesthetists, and general surgery is apparently reluctant to relinquish its dominance of anesthesiology. This produces problems difficult to surmount, and from the standpoint of anesthesiology, the legal fraternity has little opportunity to prosecute violations of the "Corporate Practice Act."

6. Economic problems in anesthesiology are common to those of other branches of the medical profession and to practically all of the various components of our worldly culture. The high degree of specialization so far attained and demanded by all fields of endeavor and civilization, in general, has necessitated increased costs, which must be passed on to the consumer if present high standards are to be maintained and improved. Charles P. Emerson, Sr., M.D., a noted internist of some two to three decades ago, often made the statement, "The practice of medicine in any given era conforms to the culture of that particular period." To me, this is a very noteworthy statement and should be widely publicized. If anything is wrong with the present practice of medicine, then, the same fault exists with the culture of the present time.

The panorama of our worldly culture, in the past two decades, seems to have changed from an atmosphere of dubious tranquility to one of

irresponsible high pressure. Expressions from laymen from different walks of life indicate that it is desirable for the practice of medicine to retain its serene tranquility. They do not seem to realize that the practice of medicine must go along with the culture of the times if it is to exist and maintain its high standards.

It is my humble opinion that every field of endeavor is dependent, to a greater or lesser degree, upon every other field of endeavor. In the field of medicine as a whole, each recipient of medical service and care is a separate and distinct case unto itself. There is a vast difference between custom-built Cadillacs and line-run Fords, yet both are automobiles and each capable of transporting people and merchandise. Likewise, there is a vast difference in cost. There is also a vast difference between anesthesia for incision and drainage of an abscess and anesthesia for excision of a coarctation of the aorta, yet they are both anesthetics. Here, too, there is a difference in cost. When each commodity and service does not receive adequate compensation, an economic problem is initiated.

The problems of the six categories listed above result in one major problem, "Exploitation of Time." All components of our worldly culture, therefore, should co-operate to eliminate this exploitation of time. Each individual is responsible for compensating for any commodity or service he receives. Mentally and physically defective individuals and life's unfortunates should be aided but not unduly at the expense of our group or one individual. Duty should not be influenced by sentiment. Economic stability should not be sacrificed to appease unjust demands by pressure groups.

Facts speak for themselves. Anesthesiology is a distinct branch of the medical profession. It must be considered and respected as such. Anesthesiology, united with all the branches of medicine, must insist on adequate compensation for services rendered. Concentrated efforts should be made to reduce to a minimum the exploitation of time.

THERAPEUTIC ABORTION

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Thorazine in the Treatment of Acutely Disturbed Psychotic Patients

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THERE are presently well over thirty papers in the literature on the use of Thorazine in the treatment of various medical, surgical and psychiatric conditions. Chemically, the drug is related to the antihistamines, but its actions differ from antihistamine type drugs in a number of regards. Primarily, it is a central nervous system depressant and, secondarily, has a mild antispasmodic and adrenalytic activity. It potentiates hypnotics, sedatives, narcotics, anesthetics and alcohol. It appears to act at the cortical and subcortical levels in the cerebrum and on the diencephalon. Its sedative effect is thought to be the result of interruption of impulses passing between the diencephalon and the cerebral cortex. Animal studies indicate that some degree of tolerance to the drug develops, and our clinical impression in the use of Thorazine with patients supports this. It has a wide margin of safety for clinical use, although it has been reported that an obstructive type jaundice develops in 1 to 2 per cent of patients receiving it over a prolonged period of time.

D. Elks, writing in the *British Medical Journal* of September 4, 1954, studied the effects of Thorazine on chronically overactive psychotic patients. He used only 150 milligrams a day, except in a few patients who received 300 milligrams a day transitorially. Of his twenty-seven patients, nine showed an increase in weight from 11 to 34 pounds in twenty-two weeks. Seven of the patients were considered definitely improved, and eleven slightly improved. Improvement did not become apparent until after three to six weeks of continuous medication. The affective group appeared to respond slightly better than the schizophrenics. Patients became quieter, less tense, and less disturbed by their hallucinations and delusions, and more amenable to the suggestions and care of the nursing staff. Three patients of the twenty-seven were thought fit for parole, though none was considered fit for discharge. In none of the cases was the content of the psychosis changed. Schizophrenic patients continued to be subject to delusions and hallucinations, the affective swings of the hypomanic patients continued at intervals normal to each patient, and the chronically agitated melancholics did not themselves admit to any improvement in their mental state. He felt that the relief afforded by the chloropromazine thus was principally symptomatic.

Garmany, May, and Folkson, writing in the Department of Psychiatry, Westminster Hospital, described the use and action of chloropromazine in psychoneuroses. They had eighteen cases where tension was predominant and improvement occurred with medication. Results in patients with predominant obsessional symptomatology were poor. They could not confirm the findings of Sigwald and Bouttier concerning the relief given by chloropromazine to patients with obsessional, depressive, or phobic symptoms. They did concur on the value of the drug in alleviating tension, both in its affective and muscular sense. They suggested that a combination of chloropromazine, psychotherapy, and what they speak of as "relaxation treatment" appears to give the best results obtainable in the treatment of the tension state. Lancaster combined chloropromazine and insulin in the treatment of eleven patients. They concluded that the drug caused apparent, but not significant, decrease in the total number of insulin induced anxiety symptoms, and altered the type of these symptoms. Palpitation and tachycardia were increased; perspiration, flushing, anxiety, restlessness, epigastric sensation, and tremor were diminished. Chloropromazine did not influence the action of insulin on blood sugar levels. A combination of insulin and chloropromazine was found to be useful in controlling refractory excited patients who were not controlled by either drug alone when administered in dosages of 50 milligrams three times a day. They felt the combination was useful in making more manageable pa-

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tients who become excited during insulin coma treatment.

We should like to report here our experience with the use of Thorazine in varying dosages in thirty chronically disturbed psychotic patients. When the project was initiated, it was decided to administer the drug to patients who were disturbed, and who, because of this fact, were management problems on the ward. Initially, the dosages were rather low, being approximately 75 milligrams per day, but with the rapid gains in experience with the drug, our staff members began rapidly stepping up the drug dosage so that one patient received 500 milligrams per day, the bulk of them receiving between 100 and 200 milligrams per day. The drug is prepared for both intramuscular injection and as tablets. Many of the patients would take the drug by mouth, but in those instances when they would not, the drug was given by injection intramuscularly and the almost universal experience with these thirty patients was that after a few days, the patients would willingly take tablets and injection was no longer necessary. The drug was not given on the basis of diagnosis, but rather on the basis of clinical evidence of marked intrapsychic disturbance. It soon became apparent that low dosages were essentially ineffective in the management of patients who were markedly disturbed, and it was necessary to administer larger amounts. A rule of thumb was that a dose was sufficient to cause the desired result.

When the dosage was sufficient, there was usually improvement in the patient's personal appearance within a short period of time; in general, one week after effective dosage levels had been achieved. Where many had been untidy and incontinent and unkempt, they began to dress more neatly and show more attention to their personal appearance. Somewhat more striking was the change in their behavior. Patients who had been assaultive, destructive, and combative showed improvement in their behavior, becoming much quieter or only showing agitation. In general, the trend of the drug effect was to quiet the hyperactivity which was common to the majority of this series. So far as the patients' activities were concerned, the Thorazine seemed to have a desirable tranquilizing effect. It was found in those instances where patients could be helped to overcome their initial disturbance, and could be gotten to occupational or recreational therapy or work therapy, that they could continue the new activity even when the Thorazine was discontinued. It was likewise found that patients given Thorazine alone without any additional therapeutic measures frequently relapsed to their previous disturbed condition when the Thorazine was discontinued. It was as though Thorazine acted as a therapeutic lever enabling the physician to shift the patient into a more productive, more healthy activity. We found very little change in the mental trends of patients receiving the drug. They continued as previously, although they did not have the active force behind them that was noted before Thorazine was given. Paranoid delusions continued unabated, but tended to be less spontaneous and elicitable only on questioning. Two patients with obsessive-compulsive symptoms showed no change in this behavior. We found that there was some change in the affective area, with patients becoming less hostile, inappropriate or depressed when under the influence of Thorazine. It should be understood that this is quantitative rather than qualitative and that the essential psychopathological process was not in any way altered by the administration of the drug.

A certain amount of tolerance seemed to develop to the drug. For example, one patient who was gradually built up to a dosage level of 400 milligrams a day had the drug discontinued because the supply ran short. When the drug became available again in a few days, she was placed at the same dosage level and showed marked side effects with drowsiness and sleepiness. This seems to indicate that some tolerance develops as long as the patient is on the drug, but disappears in a short time. The small dosage level in the tablets made administration somewhat difficult, and taking the medication was referred to jokingly as, "It was like eating a handful of popcorn." A 100 milligram tablet is currently available which makes administration simpler.

The over-all impression of the effect of Thorazine on this group of thirty disturbed psychotic patients is as follows: no patients became worse, eight patients showed no improvement, seven patients showed slight improvement, eleven patients moderate improvement, and four patients marked improvement.

Side effects were noted in eight patients (somewhat less than one-third the total) a figure somewhat higher than that recorded in the literature. Five of the patients complained of drowsiness, with

three of this group of five complaining of the additional symptoms of dizziness. These reactions did not seem to correspond with the dosage level which ranged in these particular individuals from 50 milligrams a day to 500 milligrams a day.

Of the remaining three who had side effects, these were somewhat more serious. One, at a dosage level of 200 milligrams a day, showed marked facial puffiness and a mild generalized macular rash with pruritus. This disappeared within seventy-two hours after the drug was discontinued. The second of these three patients initially showed nausea, vomiting, and syncope, and at the maximal level of 400 milligrams a day, experienced a pruritic, macular rash on the face and back and a slight generalized facial edema. This toxic effect disappeared within twenty-four hours after withdrawal of the drug. The third patient of these three experienced an intercurrent temperature elevation and complained of pain in the substernal notch. She was on a dosage level of 200 milligrams a day. In summarizing the side effects, then, approximately one-third of all patients had side effects and 10 per cent of all patients had side effects of serious to moderately serious degree. One patient, not included in this series, was given Thorazine in withdrawing her from dilaudid addiction. At a dosage level of 300 milligrams a day, the patient showed no withdrawal symptoms, and the drug apparently modified or prevented nausea and vomiting which is common with withdrawal and allayed her anxiety. There was some dizziness which she experienced and difficulty in focusing her eyes, a symptom not complained of by any other patient.

There seems to be little question but that Thorazine has a place in the armamentarium of the psychiatrist. However, it is not a magical drug which can be dispensed with the idea that the drug itself will cure the patient or insure his improvement. When combined with other measures, however, it seems to have real promise. In a number of patients, particularly the ones who showed marked improvement, the patients were able to engage in work at the hospital, go to occupational therapy, or take part in other activities which previously had been impossible for them because of their disturbed state. When the Thorazine was withdrawn, those patients who had made movement and progress in other areas remained improved, whereas those who had not moved in other therapeutic areas for the most part relapsed. Dosage level was very important in achieving good results. Our highest dosage level was 600 milligrams per day, but for the most part, patients benefited by approximately 300 milligrams per day.

From our rather limited experience with the drug, and from a review of the literature on its use, it would seem that Thorazine has a tranquilizing effect without altering the basic structure of the psychosis. It provides a valuable tool for the psychiatrist in assisting the disturbed psychotic patient to engage in more productive and healthful activity.

ENDOMETRIOSIS

(Continued from Page 794)

patients having sterility and endometriosis will become pregnant with the employment of testosterone therapy, and about 55 per cent will become pregnant following conservative surgery.

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Detroit Surgical Association

Meeting of April 23, 1956

CAROTID ARTERY OCCLUSIONS: DIAGNOSIS AND TREATMENT

By John E. Webster, F. A. Martin and E. S. Gurdjian

The material pertains to a presentation of evidence supporting the presence of collateral circulation in the brain as revealed by (A) angiographic studies, (B) studies of thepial circulation in the brain of the monkey, and (C) the ability of cerebral vessels to dilate as shown by cinephotomicrography. The clinical effects from digital carotid compression in humans are presented to support a conclusion that such compression may have therapeutic value in encouraging collateral circulation in patients having cerebrovascular insufficiency due to partial or complete carotid occlusions.

ACHALASIA OF THE ESOPHAGUS

By W. M. Tuttle, and R. J. Barrett

Cardiospasm, or achalasia of the esophagus, is most likely due to a neuro-muscular imbalance at the cardia. There is considerable histologic evidence of degeneration of Auerbach's plexus ganglion in this condition. Previous attempts at surgical repair of this condition have utilized:

1. Dilatation. Either through the esophagus by instruments or digitally through an incision in the gastric wall.
2. Plication of the dilated esophagus above the area of constriction—a totally senseless procedure.
3. Excision of the constricted area, either locally or on with a portion of the stomach.
4. Deviation of the flow around the area by anastomosis of the fundus to a point higher in the esophagus.
5. Plastic procedures on the cardia of which the Wendell operation consisted of a longitudinal incision through all layers of the esophagus and through the constricted area and on to the cardiac portion of the stomach. This was then closed in a transverse fashion. The Heller operation consisted of a longitudinal incision through the muscularis down to but not through the mucosa and was made both anteriorly and posteriorly. This operation was followed by the least number of complications and was, in general, successful but had a fair recurrence rate. Most of the other procedures in which the mucosa was opened and sutured had a fairly high rate of anastomotic ulcer following it. We have had our best success in twenty cases treated by a modified Heller operation, in which a longitudinal incision is made down to but not through the mucosa, following which the muscularis is closed in a transverse fashion. Apparently, the mucosa fold so formed acts as a valve preventing reflux. In eighteen of the twenty patients, results were very satisfactory.

THE RESPONSE OF EXPERIMENTALLY PRODUCED ACUTE HEMORRHAGIC PANCREATITIS TO CORTISONE

By Powell Perkins and C. Jackson France

An investigation of the effects of cortisone therapy on the survival time of dogs in whom acute hemorrhagic pancreatitis was created experimentally was done using both intramuscular and intravenous cortisone. Two series of animals were studied.

In the first group pancreatitis was created in 20 dogs by devascularizing the distal one-half of the anterior lobe of the pancreas, ligating the main pancreatic duct, and infiltrating the anterior lobe with formalin (1 cc. per 10 pounds body weight). Ten animals were given I. M. cortisone 1 mgm/lb. daily for five days. Eighty per cent of these treated animals survived as compared to only 20 per cent of the untreated dogs.

In the second series pancreatitis was created by ligating the ducts of both lobes of the pancreas, ligating the superior pancreaticoduodenal artery and infiltrating the entire gland with 10 per cent formalin. Alternate dogs were given hydrocortisone 1 mgm/lb. intravenously in 5 per cent D/W for five days, and the remaining were given an equal volume of cholesterol solution. In this group 70 per cent of the treated animals survived and in the untreated only 30 per cent survived.

Postmortem examination of all dogs revealed extensive hemorrhage and necroses of the pancreas and also enzymatic digestion of the pancreatic cells and blood vessels. Serum amylose values ran as high as 6000 u.

The events in early life may be important in determining the presence of tumor later during the typical carcinoma age.

* * *

The induction period for tumors may be long and a tumor may occur long after exposure to the etiological factor has stopped.

* * *

The more the racial peculiarities of cancer are studied, the greater is the tendency for them to indicate environmental rather than truly hereditary causes.

* * *

The technique of studying large populations by statistical methods, geographically and racially and before and after mass migration, appears to be a very promising method for revealing etiological factors.

Education in the Art of Medicine

Is it possible that instruction in the Science of Medicine is too far ahead of that in the Art of Medicine? Many of us continue to ponder this question, and after talking with a large number of young men who were graduated recently from medical school, I am even more impressed that something of the philosophy of the private practice of medicine is lacking from modern medical education.

Our medical schools are doing an excellent job of teaching scientific medicine, but it appears that their scientific programs are so crowded there is little time left for instruction in the social and economic side of medicine.

This is regrettable because as our scientific knowledge expands and as physicians care for more and more patients, it would seem increasingly important that new doctors have a prior knowledge of the Art of Medicine, the pitfalls of practice, ethical principles and medical socio-economics.

It is true that many county medical societies now have excellent programs of indoctrination for new members, as well as "refresher courses" in socio-economics for older members. Such indoctrination programs are very commendable, and these activities should be enlarged. However, it would seem much more effective if these men had been reached long before they were eligible for county society membership.

In recent years MSMS has sponsored a conference for interns, residents and senior medical students at the time of the Michigan Clinical Institute to help these young people get a clearer picture of actual day-to-day practice of medicine from doctors already serving the people of Michigan as private practitioners. Those attending these conferences get a different view of the physician's problems and responsibilities than they do in the halls of the universities. This is a good start.

Under the able chairmanship of R. W. Teed, M.D., of Ann Arbor, MSMS also has made progress in presenting socio-economic topics through special lectures presented at the state's two medical schools periodically. This, too, is a fine start toward teaching the Art of Medicine even before the years of internship . . . when it is most effective.

My hope is that in the future, MSMS will be able to make even greater strides in preparing future doctors for the private practice of medicine as a regular part of undergraduate medical education. I sincerely believe this is one of the most important phases of learning how to be a true physician.

W. D. Jones.

President, Michigan State Medical Society

President's



Message

Editorial

NEW MEDICAL CENTER

In Detroit, on May 23, 1956, announcement was made of plans for a new medical center, using Harper Hospital, Grace Hospital, Woman's Hospital and Children's Hospital plants now in operation. The surroundings of some of these hospitals are slum areas. It is proposed to acquire about eighty-five square blocks surrounding these hospitals, extending from Woodward to Hastings, the new Expressway, and from the Edsel Ford Expressway to Mack. About six of these eighty-five blocks will be occupied by Harper, Grace, and Woman's Hospitals and their auxiliary services. An extension is to include Children's Hospital which is some distance removed. The whole area contains about 200 acres and includes many worthwhile structures which are to help make the center more useful and attractive. Included are the Institute of Arts, the Rackham Building, the Cancer Research Institute, several churches—some of which are large, four schools—some private, many good business establishments, good apartments and hotels making up islands in this overall slum area.

On the sites vacated will be built numerous apartments and other structures to house the 3,600 employes of the four hospitals. Parkways and parking facilities will be used to beautify the area and businesses which might be somewhat kindred to a medical center will be invited to locate here. It is estimated that to acquire the necessary land will cost $22,000,000. The first announcement placed the whole project as over $100,000,000 but it will be several times that amount.

Convalescent Care

What a wonderful opportunity actually to attempt a scheme which has challenged many medical and hospital executives. Why not build in this area a good modern convalescent and custodial home? Many patients in the four area hospitals recover sufficiently so they could easily be removed to a much less complicated, less expensive, but modern, good facility for convalescent care which could extend in many cases for weeks. Other persons from the hospitals or their own homes need moderate nursing care plus maintenance, room, board, for short or longer periods. At present these people occupy elaborate and expensive general hospital beds costing either their insurance companies or themselves $25.00 to $40.00 a day. The attention just outlined could probably be furnished for $6.00 or $8.00, maybe less, and could be just as satisfactory, because while the institution mentioned would provide for first aid, patients needing full medical or nursing care suddenly or accidentally could be referred back to the general hospital. The convalescent center should be completely disassociated from either hospital. In that way, it could maintain itself in the price field contemplated.

Such an installation could easily be used by insurance-paid or private-paid patients and might greatly relieve the high cost of present hospital care for long-staying patients who have no other place to stay during disability or delayed rehabilitation. The convalescent problem or nursing home, as it now exists, is completely inadequate. The places are mostly old homes or other shelters, of which there are 480 registered in the state. This new medical center is an opportunity to experiment in making a satisfactory advancement in medical care for countless thousands.

The place and the time are here and now. We hope someone in the planning position will attempt just such a pioneering venture.

VETERANS' HOMETOWN CARE

The care of veterans with service-connected disabilities has been a problem since the First World War. It was inconvenient and costly for the veteran to travel to selected places in the state where there was a Veterans Administration Facility. The expense was out of proportion, and the veteran decidedly discomforted. Ten year ago, the condition not having improved after the Second World War, the Michigan State Medical Society advocated a scheme by which the home-town doctors and hospitals might be used through special arrangements with the Administration to make the service available. The plan known then as the Michigan Plan was adopted. Michigan Medical Service, through its ideal association and represen-

tation with the doctors, acted as intermediary, serving as the contractor with the Veterans Administration. Other states which had Blue Shield followed suit, and contracted for veterans' hometown care. Some states contracted directly.

Michigan Medical Service acted for the Veterans Administration and the doctors, servicing the program, paying the doctors and then billing the VA and being paid cost plus actual expense. That expense has been varied: around 5 to 6 per cent; the last year, 6.25 per cent. At the end of ten years, there being about eight or nine states still administering to the veterans under our plan, the Veterans Administration last November wrote to our President, William S. Jones, M.D., announcing the discontinuance of the use of Michigan Medical Service as an intermediary, and cancellation of the program to take effect July 1, 1957. Editorials and notes were prepared, a special meeting of the Executive Committee of the Council met in Battle Creek with Congressman August Johansen to make plans, and a conference was held in Chicago January 9, 1956, with representatives from Michigan, Wisconsin, South Carolina, Colorado, Oregon, and Washington. Michigan was represented by Michigan Medical Service officers and veterans organization officers.

A conference was held in Washington, D. C., on February 24, 1956, with the Administrator of Veterans' Affairs, Herbert V. Higley, Dr. Middleton (the Chief Medical Officer who wrote the notifying letter), Congressman Johansen, an assistant to Senator Potter, and John Castallucci, Executive Director of the National Blue Shield Commission. The delegation from Michigan consisted of W. S. Jones, M.D., President of the Michigan State Medical Society; L. Fernald Foster, M.D., Secretary; Hugh Brenneman, Public Relations Counsel; Wilfrid Haughey, M.D., Editor of THE JOURNAL of the Michigan State Medical Society, and President of Michigan Medical Service; Jay C. Ketchum, Executive Director of Michigan Medical Service; F. Gordon Goodrich, Assistant Executive Director of Michigan Medical Service; Joe Mann, Public Relations Director, Veterans of Foreign Wars, and Carl Seaman of the American Legion.

The conference developed the fact that the Veterans Administration was trying to save money, but the Michigan delegation was able to demonstrate that there could not be much saving, and that there would be considerable realigning and dissatisfaction on the part of the veterans being served. Mr. Higley promised to reconsider. Another conference was held at the time of the Chamber of Commerce meetings at which Mr. Higley announced his entire satisfaction with the Michigan program and his content with its administration. He assured the group that the plan would be continued in Michigan. As of July 1, 1957, unless some other plans are made, Michigan will be the only state still giving our veterans hometown care by their own doctors, and serviced by Blue Shield.

The Washington Report on the Medical Sciences, May 14, 1956, says: The Veterans Administration's Department of Medicine and Surgery now has fee schedule arrangements with twenty-five State Medical Societies for outpatient care of beneficiaries. In nine other states, the agreement is made with the State Blue Shield Plan which acts as an intermediary for billings and collections. In states where no agreement is in force, the Catalog No. 5 Guide for charges for medical services is used by VA field stations in making compensation for fee basis medical care.

STATE DEPARTMENT OF SOCIAL WELFARE

In March, 1956, after many months of study and experimentation the Michigan State Department of Social Welfare and its Medical Advisory Committee has revised form SB-54 and form SB-54A, making them much simpler and requiring the doctor to fill out a single form much less frequently. A diagnosis is required. Some months ago, we mentioned the necessity of sufficient description to justify the suitable determination by the medical advisor. The cost of medical care is to be estimated as needed for less than three months, or for more than three months. Drugs, diet, and nursing care may also be specified.

In addition to his maintenance allowance, the non-institutional patient receiving old age assistance, aid to the blind, or aid to the disabled may now be given $3 per month for miscellaneous or non-chronic medical costs. If this is not sufficient for his needs, he will be allocated the amount his doctor specifies on Form SB-54 as chronic medical need, if within legal limits. This will continue as long as needed if, in turning in his Form SB-54A each three months, he demonstrates that he has secured the allowed medical care. Should he need more, a statement from his doctor will suffice.

(Continued on Page 886)


O. Anderson, M.D.


K. E. Appel, M.D.


J. P. Caffey M.D.


L. A. Calkins, M.D.


E. P. Cawley, M.D.


D. E. Clark, M.D.

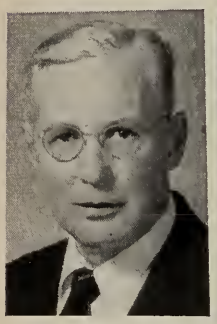

F. A. Coller, M.D.


R. C. Connelly, M.D.

1956 Guest Speakers


A. C. Corcoran, M.D


E. J. DeCosta, M.D.


G. S. Fitz-Hugh, M.D.

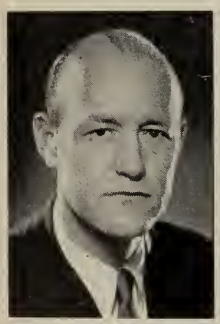

J. W. Henderson, M.D.

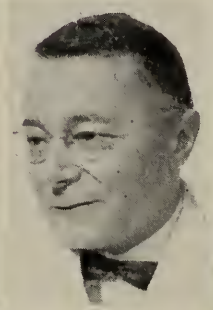

J. M. Kaufman, M.D.


M. R. Kaufman, M.D.


F. R. Keating, Jr., M.D.

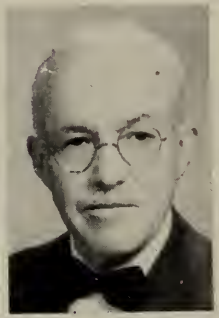

A. M. Large, M.D.


J. K. Lattimer, M.D.


A. A. Liebow, M.D.


E. P. McCullagh, M.D.


P. S. MacNeal, M.D.


J. H. Means, M.D.


G. R. Meneely, M.D.


S. E. Miller, M.D.


J. M. Murphy, M.D.


O. S. Orth, M.D.


C. A. Poindexter, M.D.


H. M. Pollard, M.D.


M. Prinzmetal, M.D.

The 1956 Annual Session - Number 91

The MSMS Annual Session—already the envy of many state societies for its scope, practical value, and general excellence—will add to its reputation, for outstanding postgraduate medical education in 1956 when the 91st edition is presented in Detroit on September 26-27-28.

Maintaining the MSMS policy of packing practical value into each of its postgraduate and scientific meetings, every topic at the 1956 Annual Session will be applicable to clinical medicine. Diagnosis and treatment usable in daily practice will be stressed throughout.

M. A. Darling, M.D., of Detroit, is General Chairman and head of the Committee on Arrangements.

Teachers from across the nation will lecture at the six scientific assemblies and sixteen section meetings planned during the intensive three-day session. In all there will be thirty-one nationally-recognized speakers from twenty-three medical centers located in nineteen different cities.

Once again the Annual Session will open with General Practice Day on Wednesday, September 26, its varied program aimed at the interests of Michigan GP's.

At least seven ancillary and specialty groups will hold meetings and lecture sessions during the three-day period, supplementing the MSMS program.

All MSMS meetings, including the two-day session of the House of Delegates preceding the scientific assemblies, will be held in the Sheraton-Cadillac Hotel.

The technical and scientific exhibit this year will feature 102 displays, which also offer important educational opportunities to Annual Session registrants.

Daily discussion conference each noon will allow for personal consideration of cases and problems with the lecturers. The entire lineup of speakers for each day will take part. These conferences have become one of the most popular attractions of the Annual Session since they were introduced several years ago.

Foremost non-scientific meeting during the Annual Session will be the traditional Officers' Night program on Wednesday evening, September 26, when new officers of MSMS will be introduced and inducted. Special awards also will be presented for outstanding service in medicine and health affairs. Highlight of the evening will be the Biddle Lecture by a well-known figure who will discuss a non-medical topic of vital concern to doctors of medicine. Officers' Night will be open to the families and guests of MSMS members.

An added highlight, new for 1956, will be the Officers' Night Banquet at 6:30 P.M. Wednesday, a subscription dinner sponsored by MSMS and its Woman's Auxiliary. MSMS officers, Woman's Auxiliary officers, and the Biddle Lecturer will be honored guests.

MSMS will be host Thursday evening, September 27, at a program of "after hours" amusement and entertainment during State Society Night. Dancing and a sparkling floor show will be among the attractions.

Members of medical organizations in neighboring states and the Province of Ontario have been invited to share the Annual Session with MSMS members, and early indications are that past attendance records will be threatened. Hotel accommodations may be at a premium and early reservations are urged.

The MSMS Annual Session is one of the major services offered by your State Medical Society, and one of the most valuable. . . . It's yours for the asking, Doctor!


H. S. Rattner, M.D.


J. R. Schencken, M.D.


L. Schiff, M.D.


T. F. Schlaegel, Jr., M.D.


S. H. Sturgis, M.D.


W. E. Wheeler, M.D.

Michigan State Medical Society

The Ninety-first Annual Session

SHERATON-CADILLAC HOTEL, DETROIT

September 24-25-26-27-28, 1956

ANNUAL SESSION INFORMATION

DIRECTORY

Headquarters—Sheraton-Cadillac Hotel, Detroit

Registration—for House of Delegates: Sheraton-Cadillac Hotel, Detroit, Grand Ballroom Foyer (Fourth Floor) Monday, Sept. 24, 8:30 a.m.

Scientific Assemblies—Grand Ballroom—Wednesday, Thursday, Friday, September 26-27-28

House of Delegates—Monday-Tuesday, September 24-25 (Grand Ballroom, Sheraton-Cadillac Hotel)

Exhibits—Wednesday-Thursday-Friday, September 26-27-28, Fourth Floor, Sheraton-Cadillac Hotel)

Press Room—Suite 500, Sheraton-Cadillac Hotel

Woman's Auxiliary Headquarters—Fort Shelby Hotel, Detroit

Michigan State Medical Assistants Society Headquarters Detroit-Leland Hotel, Detroit

● **REGISTER**—Fifth Floor, Sheraton-Cadillac Hotel—as soon as you arrive.

Hours:

Tuesday, September 25, 1:00 p.m. to 5:00 p.m.
Wednesday, September 26, 7:30 a.m. to 5:15 p.m.
Thursday, September 27, 8:30 a.m. to 5:15 p.m.
Friday, September 28, 8:30 a.m. to 3:30 p.m.

● **NO REGISTRATION FEE FOR MEMBERS OF MSMS AND OTHER STATE MEDICAL ASSOCIATIONS, AMA AND CANADIAN MEDICAL ASSOCIATION.**

Admission will be by badge only to all Scientific Assemblies, Section Meetings, Discussion Conferences and the Exhibition. Please present your MSMS or other State Medical Association, AMA, or CMA Membership card to expedite your registration. We wish to save your time.

● **MICHIGAN DOCTORS OF MEDICINE,** in practice but who are not members of MSMS, if listed in the American Medical Directory, may register as guests upon payment of $25.00. This amount will be credited to them as dues in the Michigan State Medical Society FOR THE BALANCE OF 1956 ONLY, provided they subsequently are accepted as members by the County Medical Society in whose jurisdiction they practice.

M. A. Darling, M.D., of Detroit, is General Chairman of the 1956 MSMS Annual Session.

● **DOCTOR,** register Tuesday! Registration of physicians will be held Tuesday afternoon from 1:00 to 5:00 p.m.—as well as on Wednesday-Thursday-Friday, during the 1956 MSMS Annual Session. The Tuesday afternoon registration hours are arranged so that physicians may avoid waiting in line Wednesday morning before the opening Assembly.

We recommend to Detroit physicians—and those who arrive in Detroit on Tuesday—that they register Tuesday, September 25, from 1:00 to 5:00 p.m., Fifth Floor, Sheraton-Cadillac Hotel.

SECTION MEETINGS

WEDNESDAY, SEPTEMBER 26

5:00 to 6:00 p.m.
General Practice
Occupational Health
Obstetrics-Gynecology
Pediatrics
Public Health & Preventive Medicine
Urology

THURSDAY, SEPTEMBER 27

5:00 to 6:00 p.m.
Gastroenterology-Proctology
Nervous and Mental Diseases
Ophthalmology
Otolaryngology
Radiology
Surgery

FRIDAY, SEPTEMBER 28

5:00 to 6:00 p.m.
Anesthesiology
Dermatology-Syphilology
Medicine

3:00 to 9:00 p.m.
Pathology

● **TELEPHONE SERVICE**—Special lines to handle local and long distance telephone service for registrants at the MSMS meeting will be installed on the Fourth Floor, near Grand Ballroom, Sheraton-Cadillac Hotel. Call WOodward 1-8000.

● **GUEST ESSAYISTS** are very respectfully requested not to change time of their lecture with another speaker without the approval of the Assembly Chairman. This request is made in order to avoid confusion and disappointment on the part of members of the audience.

● **CHECK ROOM**—Fifth Floor, Sheraton-Cadillac Hotel near elevators.

NEW INFORMATION IN THE EXHIBIT

Many items of interest or education will be found in the large exhibit of 102 technical displays. The Exhibit Section at MSMS Annual Sessions is as important, informative and desirable to most doctors of medicine as the scientific papers presented in the Assembly room.

Doctor, stop at every booth—you'll be surprised how much you'll learn! No high-pressure salesman but a courteous well-informed exhibitor will greet you and supply you with some valuable information helpful to your patients.

● **BANQUET—Officers' Night**—Wednesday, September 26, 1956. At 6:30 p.m. (Informal), Grand Ballroom, Sheraton-Cadillac Hotel, Detroit. All registrants and their ladies are cordially invited.

● **POSTGRADUATE CREDITS ARE GIVEN TO EVERY MSMS** member who attends the Annual Session.

INFORMATION OF PRACTICAL VALUE IN DAILY PRACTICE will be found at the Michigan State Medical Society Annual Session. All subjects on the MSMS Annual Session Program are applicable to clinical medicine. They stress diagnosis and treatment in everyday practice.

● **TRANSPORTATION**—The C & O Streamliners afford a convenient means of transportation to the MSMS Annual Session in Detroit for hundreds of physicians located in the central and western parts of the State.

● **PARKING**—Do not park on Detroit's streets. Inside parking at a convenient distance from the Sheraton-Cadillac Hotel, is available at the Book Tower Garage, 333 State, the DAC Garage, 1754 Randolph, and the Grand Circus Garage, 1776 Randolph.

● **CABARET-STYLE DANCE AND FLOOR SHOW**, with the compliments of the Michigan State Medical Society, will be held in the Grand Ballroom of the Sheraton-Cadillac Hotel at 10:30 p.m., Thursday, September 27. All who register, and their ladies, will receive a card of admission and are cordially invited to attend.

● **THE DETROIT HISTORICAL MUSEUM**, Woodward at Kirby, Detroit (TEmple 3-5410) invites all MSMS registrants to visit the Museum while in Detroit. Hours: 1:00 p.m. to 10:00 p.m. Tuesday through Friday.

MICHIGAN MEDICAL SERVICE MEMBERS' MEETING

Blue Cross-Blue Shield Building

441 East Jefferson Ave., Detroit

Tuesday, September 25, 1956

Coincident with MSMS Annual Session

11:45, 12:00, 12:15, buses will leave Sheraton-Cadillac Hotel

12 Noon-12:30 p.m.—"See Your Plan In Action"

12:30 p.m.—Preprandial—Private Dining Room, Fifth Floor

1:00 p.m.—Lunch

2:00 p.m.—Meeting of Corporation—Auditorium

All MSMS Delegates are members of Michigan Medical Service Corporation and are expected to attend the MMS Luncheon and Annual Meeting. The MMS Annual Meeting is open to ALL members of the medical profession who are cordially invited to attend.

THREE DISCUSSION CONFERENCES



HAROLD C. MACK, M.D., Detroit, Leader on Wednesday, September 26, 1956



FREDERICK A. COLLER, M.D., Ann Arbor, Leader on Thursday, September 27, 1956



HAROLD HENDERSON, M.D., Detroit, Leader on Friday, September 28, 1956

Three quiz periods will be held Wednesday-Thursday-Friday, September 26-27-28, Grand Ballroom, Sheraton-Cadillac Hotel, 12:00 noon to 1:00 p.m. with all the guest speakers of the day on the platform.

An opportunity to ask questions concerning the presentations of the guest essayists, or to discuss an interesting case with them, is provided at these Discussion Conferences.

● **THE SCIENTIFIC PRESS RELATIONS COMMITTEE** is composed of: H. F. Dibble, M.D., Detroit, Chairman; L. J. Bailey, M.D., Birmingham; A. B. Gwinn, M.D., Hastings; J. J. Lightbody, M.D., Detroit; and M. R. Weed, M.D., Detroit.

● **THE HOUSE OF DELEGATES PRESS RELATIONS COMMITTEE** is composed of: J. E. Livesay, M.D., Flint, Chairman; H. F. Dibble, M.D., Detroit; L. Fernald Foster, M.D., Bay City; A. B. Gwinn, M.D., Hastings; and K. H. Johnson, M.D., Lansing.

● **THE MSMS HOUSE OF DELEGATES** convenes Monday, September 24, at 10:00 a.m., Grand Ballroom, Sheraton-Cadillac Hotel; it will hold three meetings on Monday, September 24, at 10:00 a.m., 2:00 p.m. and at 8:00 p.m.; also two meetings on Tuesday, September 25, at 9:30 a.m. and at 8:00 p.m.

● **PAPERS WILL BEGIN AND END ON TIME**—Believing there is nothing which makes a scientific meeting more attractive than by-the-clock promptness and regularity, all meetings will open exactly on time, all speakers will be required to begin their papers exactly on time and to close exactly on time in accordance with the schedule in the program. All who attend the meeting, therefore, are requested to assist in attaining this end by noting the schedule carefully and being in attendance accordingly. Any member who arrives five minutes late to hear any particular paper will miss exactly five minutes of that paper!

GENERAL PRACTICE DAY

1956 MSMS Annual Session

Wednesday, September 26, will be "General Practice Day" at the Detroit Session of the Michigan State Medical Society.

The Assembly subjects on the first day of the convention are especially dedicated to the interest of general practitioners.

The General Practice Section also will meet on Wednesday at the Sheraton-Cadillac Hotel.

● **THE FOURTH BEAUMONT LECTURE OF THE MICHIGAN STATE MEDICAL SOCIETY** will be presented by Leon Schiff, M.D., of Cincinnati, Ohio, on Thursday, September 27, 2:00 p.m. Doctor Schiff's subject will be "Clues and Pitfalls in the Diagnosis of Jaundice."

● **THE TECHNICAL EXHIBITS** will open daily at 8:45 a.m. and close at 5:15 p.m., except on Friday when the break-up is at 3.30 p.m. Frequent intermissions to view the educational exhibits have been arranged before, during, and after the Assemblies. Bring to the MSMS Convention a "WANT LIST" of your needs and place an order with an MSMS exhibitor.

● **A CONCENTRATED THREE-DAY POSTGRADUATE COURSE**—A CAPSULE OF GREAT VALUE TO THE MICHIGAN PRACTITIONERS OF MEDICINE—THE MSMS ANNUAL SESSION OF 1956.

MEETINGS OF SPECIAL SOCIETIES, ALUMNI AND AUXILIARY GROUPS

Tuesday, September 25, 1956

1. **MICHIGAN BRANCH, AMERICAN ACADEMY OF PEDIATRICS—**

Auditorium, Henry Ford Hospital

Chairman—Harry A. Towsley, M.D., Ann Arbor

10:00 "Diabetes in Pregnancy. Delivery and Post-natal Infant Care."
C. Paul Hodgkinson, M.D., Obstetrician-in-Chief, Henry Ford Hospital, Detroit.

10:30 "Neonatal Mortality."
Ruben Meyer, M.D., Children's Hospital, Detroit. Chairman, Wayne County Infant Mortality Study.

11:00 "Current Cases."
Joseph A. Johnston, M.D., Pediatrician-in-Chief, Department of Pediatrics, Henry Ford Hospital, Detroit.

P.M.

12:45 Luncheon. Henry Ford Hospital dining room.

* * *

Chairman—Edgar E. Martmer, M.D.

P.M.

2:00 "Emotional Care of the Hospitalized Child."
Robert M. Heavenrich, M.D., Pediatrician-in-Chief, St. Mary's Hospital, and Saginaw General Hospital, Saginaw, Michigan.

2:30 "Salvaging the Mentally Handicapped."
Ernest H. Watson, M.D., University Hospital, Ann Arbor. Associate Professor of Pediatrics and Communicable Disease.

3:00 "Psychosomatic Problems in Children."
Stuart M. Finch, M.D., Physician-in-Chief, Children's Institute, Ann Arbor.

3:30 Discussion of Preceding Papers.

4:00 Business meeting.
Election.
Committee Reports.

6:00 Cocktail Hour and Dinner. Sheraton-Cadillac Hotel, English Room.
Courtesy of Baker Laboratories and Gerber Products Company.

8:30 "Carcinoma of the Thyroid in Children, and Prior Regional Irradiation."
John Caffey, M.D., Babies Hospital, New York City. Professor of Clinical Pediatrics, College of Physicians and Surgeons, Columbia University.

Wednesday, September 26, 1956

2. **THE MICHIGAN REGIONAL COMMITTEE ON TRAUMA, AMERICAN COLLEGE OF SURGEONS,** will present a scientific program Wednesday, September 26, in the Pan American Room of the Sheraton-Cadillac Hotel. The meeting starting at 2:00 P.M. will feature eight speakers discussing a variety of trauma subjects.

 Dr. Charles Johnston, President of the American Association for the Surgery of Trauma, will present some of the highlights in the history of surgery for trauma. Dr. Nicholas Gimbel of Wayne University Medical School will discuss some features of the handling of mass casualties.

 Wound healing is another of the topics of interest. All physicians are invited.

3. **MSMS SECTION ON GENERAL PRACTICE**—Section meeting from 5:00 to 6:00 p.m. in the English Room; reception at 6:00 p.m. in the Book-Casino; dinner 7:00 to 8:00 p.m. in the English Room, Sheraton-Cadillac Hotel. Following the meeting of the General Practice Section, there will be an election of officers for the ensuing year. The reception in the Book-Casino is for banquet ticket holders. Dinner speaker is Kenneth B. Babcock, M.D., Chicago, Illinois; "Present Status of General Practice Sections in Hospitals."

4. **MSMS SECTION ON PEDIATRICS**—Section meeting from 5:00 to 6:00 p.m.; reception and dinner beginning at 6:30 p.m.—all in the Pan American Room of the Sheraton-Cadillac Hotel. Attention all pediatricians and others interested—you are cordially invited to participate in the Section meeting, reception and dinner. Write Bernard Bernbaum, M.D., 17320 Livernois, Detroit.

5. **MSMS SECTION ON UROLOGY AND DETROIT BRANCH, AMERICAN UROLOGICAL ASSOCIATION**—Section meeting from 5:00 to 6:00 p.m.; reception and dinner beginning at 6:30 p.m.—all in Parlors G and H of the Sheraton-Cadillac Hotel. John K. Lattimer, M.D., New York City, will speak on "Retropubic Radical Prostatectomy for Cancer."

6. **MSMS SECTION ON PUBLIC HEALTH AND PREVENTIVE MEDICINE**—Otis L. Anderson, M.D., Assistant Surgeon General and Chief, Bureau of State Services of the U. S. Public Health Service, will be the speaker at the meeting of the Section on Public Health and Preventive Medicine, 5:00 p.m. in the Sheraton-Cadillac Hotel. Doctor Anderson will speak on "Chronic Diseases Challenge to Public Health." Cocktails will be served at 6:30 p.m. followed by a subscription dinner at 7:00 p.m. in the Sheraton-Cadillac Hotel.

 All members of the Michigan State Medical Society are invited to this meeting and all other functions of the Section on Public Health and Preventive Medicine.

7. **MSMS SECTION ON OCCUPATIONAL HEALTH**—Section meeting from 5:00 to 6:00 p.m.; reception and dinner beginning at 6:30 p.m.—all in the Sheraton-Cadillac Hotel.

8. **MICHIGAN DIABETES ASSOCIATION**—Dinner meeting beginning at 6:30 p.m. (cocktails) in the Sheraton Room of the Sheraton-Cadillac Hotel.

Thursday, September 27, 1956

9. **ALPHA KAPPA KAPPA**—Breakfast meeting at 7:30 a.m. in the Sheraton Room of the Sheraton-Cadillac Hotel.
10. **MSMS COMMITTEE OF PAST PRESIDENTS**—A luncheon meeting of the Committee of Past Presidents will be held at 12:00 noon in Parlor K of the Sheraton-Cadillac Hotel.
11. **MSMS SECTION ON GASTROENTEROLOGY AND PROCTOLOGY**—Section meeting from 5:00 to 6:00 p.m. in the English Room, Sheraton-Cadillac Hotel; reception and dinner beginning at 6:30 p.m., at the Statler Hotel honoring Leon Schiff, M.D., and Associates on the Panel. The Panel presented during the Section meeting is entitled "Medical and Surgical Problems of Liver Disease." The Moderator is Richard C. Connelly, M.D., Detroit. Participants are: Leon Schiff, M.D., Cincinnati, Ohio; H. Marvin Pollard, M.D., Ann Arbor, and Alfred M. Large, M.D., Detroit.
12. **MSMS SECTION ON NERVOUS AND MENTAL DISEASES**—Section meeting from 5:00 to 6:00 p.m.; reception and dinner beginning at 6:30 p.m. —all in the Pan American Room of the Sheraton-Cadillac Hotel.
13. **MSMS SECTION ON OPHTHALMOLOGY**—The Section meeting in Ophthalmology this year will be a departure from the usual program in that it will be a symposium on neurology of the eye at 5:00 p.m. followed by reception at 6:30 p.m. and dinner at 7:00 p.m. in the Sheraton Room of the Sheraton-Cadillac Hotel. The ladies are invited and urged to attend.
14. **MSMS SECTION ON RADIOLOGY**—Section meeting from 5:00 to 6:00 p.m. in Parlor J; reception and dinner beginning at 6:30 p.m. in Parlors G and H of the Sheraton-Cadillac Hotel. The radiologists of the state are urged to attend their Section meeting.
15. **WAYNE STATE UNIVERSITY ALUMNI DINNER**—reception at 6:00 p.m. followed by dinner at 7:00 p.m. in the English Room of the Sheraton-Cadillac Hotel. All Alumni, Faculty, and friends of Wayne State University are cordially invited to attend.
16. **MICHIGAN CHAPTER, AMERICAN COLLEGE OF CHEST PHYSICIANS**—Paul H. Hollinger, M.D., Professor of Laryngology, Rhinology and Otolaryngology, University of Illinois, will address the Michigan Chapter of the American College of Chest Physicians on "The Bronchoscopic Appearance of Bronchopulmonary Lesions." A subscription dinner will be served at 6:00 p.m. in the Sheraton-Cadillac Hotel. Dr. Hollinger's talk is scheduled for 8:00 p.m. Members of the Wayne County Medical Society are cordially invited to attend this meeting.
17. **BOARD OF DIRECTORS, MICHIGAN ACADEMY OF GENERAL PRACTICE**—12:00 noon luncheon-meeting in Parlor F of the Sheraton-Cadillac Hotel.

Friday, September 28, 1956

18. **MICHIGAN PATHOLOGICAL SOCIETY**—3:00 p.m. meeting; A Slide Seminar on Diseases of the Lower Respiratory Tract presented by Averill A. Liebow, M.D., of New Haven, Connecticut; reception and dinner beginning at 6:30 p.m.—all in the English Room of the Sheraton-Cadillac Hotel.

HOTEL RESERVATIONS

MICHIGAN STATE MEDICAL SOCIETY

91st Annual Session

Detroit, September 26-27-28, 1956

The reservation blank below is for your convenience in making your hotel reservations in Detroit. Please send your application to the Committee on Hotels for MSMS Convention, Att: B. Van DeKeere, Sheraton-Cadillac Hotel, Detroit, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant, when convenient.

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Committee on Hotels,
Michigan State Medical Society
c/o Sheraton-Cadillac Hotel
Detroit, Michigan Att: D. J. Gibb

Please make hotel reservation(s) as indicated below:

_____ Single Room(s) _____ persons

_____ Double Room(s) for _____ persons

_____ Twin-Bedded Room(s) for _____ persons

Arriving September _____ hour _____ A.M. _____ P.M.

Leaving _____ hour _____ A.M. _____ P.M.

Hotel of First Choice: _____

Second Choice: _____

Name and addresses of all applicants including person making reservation:

Name	Address	City	State

Date _____ Signature _____

Address _____ City _____

Women's Organizations

WOMAN'S AUXILIARY, MICHIGAN STATE MEDICAL SOCIETY

Thirtieth Annual Meeting

September 24-25-26-27-28, 1956

Fort Shelby Hotel

Detroit, Michigan

Monday, September 24, 1956

A.M.

10:30 Report of the Auxiliary President to the House of Delegates of the Michigan State Medical Society

Tuesday, September 25, 1956

11:00 Executive Committee Meeting

Noon

12:00 Registration, Hotel Fort Shelby

12:00 Hospitality Room opens

P.M.

12:30 Organizational Luncheon and Meeting of District Directors, Mrs. C. Allen Payne, First Vice President, presiding

3:00 Meeting of 1955-56 and 1956-57 State Chairmen. Mrs. A. C. Stander, President-Elect, presiding

6:30 Past Presidents' and Secretaries' Dinner

Wednesday, September 26, 1956

A.M.

9:00 Pre-Convention Board Meeting, Crystal Room, Hotel Fort Shelby (For 1955-56 State officers, Chairmen and County Presidents). Chairman: Mrs. Delbert M. MacGregor, President

10:30 Formal Opening of the 30th Annual Meeting of the Woman's Auxiliary to the Michigan State Medical Society. Mrs. Delbert M. MacGregor presiding

12:30 Past Presidents' Luncheon—Honoring Past Presidents of the Woman's Auxiliary to MSMS and representatives of the MSMS. Guest Speaker to be announced

Thursday, September 27, 1956

A.M.

9:00 General Session resumes—Crystal Room, Hotel Fort Shelby

P.M.

12:30 Inaugural Luncheon

2:30 to 4:00 Post-Convention Board Meeting (For all 1956-57 Officers, Chairmen and County Presidents). Mrs. A. C. Stander presiding

MICHIGAN STATE MEDICAL ASSISTANTS SOCIETY

Detroit-Leland Hotel, Detroit, Michigan

September 26-27, 1956

Wednesday, September 26, 1956

A.M.

9:00 Registration Lobby

10:00 Mr. Walter Panich, Detroit Bureau of Narcotics
"Narcotics Regulations" Colonial Room

11:00 James D. Fryfogle, M.D., Detroit, Cardiovascular and Thoracic Surgeon
"Facts and Figments of Heart Surgery"
Colonial Room

P.M.

12:30 Luncheon—Hostess: Miss Adeline French
Courtesy of Michigan Medical Service
Jade Room

2:00 Annual Business Meeting and Election of Officers Colonial Room

4:00 View Exhibits—Sheraton-Cadillac Hotel

6:00 Social Hour—Hostess: Mrs. Cora Steckel
Courtesy of Parke-Davis & Co. Jade Room

7:00 Banquet—Hostess: Miss Grace Malkey
India Room
Les Payne and the James Sisters will entertain during Social Hour and Banquet

Thursday, September 27, 1956

A.M.

9:00 Registration Lobby

10:00 Harold A. Wallace, St. Louis, Missouri, President American Trade Association Executives
"Making Yourself More Valuable"
Colonial Room

11:00 W. W. Bauer, M.D., Chicago, Director of the Bureau of Health Education
"Stop Annoying Your Patients" ..Colonial Room

P.M.

12:30 Presidents Luncheon—Hostess: Miss Marlouise Redman Jade Room
Introduction of Officers—Mrs. Elizabeth Peck
Door Prizes

2:30 Fashion Show and Tea Colonial Room
Courtesy of Demery's

4:00 View Exhibits—Sheraton-Cadillac Hotel

Anyone actively employed in a technical or in an administrative capacity in the office or laboratory of a member of the Michigan State Medical Society; also, administrative employes in the offices of Medical Hospitals or Medical Laboratories of the State of Michigan is welcome to attend all activities of the Michigan State Medical Assistants Society's meetings. All activities will be held at the Detroit Leland Hotel, Detroit, Michigan. Registration Fee for Non-Members is $2.00.

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PLEASE MAKE HOTEL RESERVATIONS AS SOON AS POSSIBLE FOR BEST ACCOMMODATIONS.

Write: Reservations, Detroit-Leland Hotel, Cass and Bagley Avenues, Detroit 26 ,Michigan.

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Please make all other reservations with the following:

Luncheon sponsored by Michigan Medical Service. Reservations by mail to: Miss Adeline French, 8-265 General Motors Building, Detroit 2, Michigan.

Banquet—$5.10 (tax and tip included)
Reservations by mail, accompanied by check or money order to: Miss Grace Malkey, 655 Fisher Building, Detroit 2, Michigan.

Presidents Luncheon—$3.00 (tax and tip included)
Reservations by mail, accompanied by check or money order to: Miss Marlouise Redman, 541 David Whitney Building, Detroit 26, Michigan.

Michigan State Medical Society

The Ninety-first Annual Session

SHERATON-CADILLAC HOTEL, DETROIT

SEPTEMBER 26-27-28, 1956

Programs of Assemblies and Sections

WEDNESDAY MORNING
September 26, 1956

First Assembly

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: H. B. Rice, M.D., Detroit

Secretary: J. E. Wentworth, M.D., Flint

GENERAL PRACTICE DAY

A.M.

9:00 "DISEASES OF THE ADRENAL GLAND"

Perry S. MacNeal, M.D., Philadelphia, Pennsylvania

Assistant Professor of Clinical Medicine, Jefferson Medical College; Physician to the Pennsylvania Hospital and to the Benjamin Franklin Clinic, Philadelphia; Physician-in-Chief, Burlington County Hospital, Mt. Holly, New Jersey

An increasing knowledge of the metabolic functions of the adrenal gland and improved methods of study in relation to abnormal functions of this gland have completely changed our concept of diagnosis and treatment during the past few years. It was just a short time ago that these diseases could only be diagnosed by inference and deduction and treated with very expensive hypodermic medications. Now they are being diagnosed by clear cut clinical observations and laboratory procedures and treated inexpensively with oral drugs. Hyperfunctioning syndromes of the adrenal gland can be diagnosed specifically and the various causes of adrenal hyperfunction (carcinoma, adenoma, hyperplasia and pituitary hyperactivity) can be fairly well differentiated. Specific medical and surgical therapy for these conditions is now a practical measure. Tumors of the adrenal medulla producing hypertension can be separated from the ordinary group of "essential" hypertensive cases so that specific surgical management can be undertaken.

9:30 "THE CLINICAL PROBLEM OF PRIMARY HYPERPARATHYROIDISM"

Francis R. Keating, Jr., M.D., Rochester, Minnesota

Professor of Medicine, Mayo Foundation Graduate School; Consultant in Medicine and Head of Section, Mayo Clinic

As originally described primary hyperparathyroidism was considered a very rare demineralizing disease of bone. Albright later demonstrated that it was much commoner than supposed and showed that it was usually to be sought not as bone disease but solely through its renal complications. Recent experience indicates that it may occur without either bone or renal manifestations and in fact often does not produce any symptoms until some complication arises. Because of the potential hazard that the persistence of hypercalcemia poses to renal function and, therefore, to life expectancy, the recognition of primary hyperparathyroidism is imperative even in the absence of symptoms.

The symptoms of primary hyperparathyroidism, when there are any, may be cataloged under three headings: (1) those due to hypercalcemia per se (these are present only in those uncommon instances in which the concentration of calcium in the serum is dangerously high); (2) those due to the urinary complications per se, and (3) those resulting from the skeletal complications per se. In any one patient many of the symptoms will be absent and a number of patients have been observed in whom all of them are absent.

From the beginning the sine qua non for the diagnosis of primary hyperparathyroidism has been the demonstration of a pathologic elevation of serum calcium which could not be accounted for on some alternative basis, such as hypervitaminosis D, myeloma,, sarcoid or carcinomatosis. Usually but not invariably the level of serum inorganic phosphorus is reduced also. The extent of these chemical abnormalities need differ from the normal by a very minute amount indeed. In cases in which clinical findings are scanty and the hypercalcemia and hyperphosphatemia are minimal or equivocal, supplementary diagnostic information is needed urgently. Other procedures which have been of assistance and which include quantitative measurement of urinary excretion of calcium in the urine (so-called Aub test), the calcium-loading test, test of tubular reabsorption of phosphate and similar measures will be reviewed in detail. When such diagnostic facilities are diligently applied and the disease is sought in all conditions likely to harbor it, such as malacic disease of bone, nephrocalcinosis, nephrolithiasis, polyuria, polydypsia and similar situations, what formerly was regarded as a rare endocrinopathy proves to be a relatively common one in clinical medicine.

10:00 INTERMISSION TO VIEW EXHIBITS

11:00 "THE GENERAL PRACTITIONER IN CHRONIC DISEASE AND DISABILITIES IN INDUSTRY"

Seward E. Miller, M.D., Washington, D. C.

Medical Director, Chief, Division of Special Health Services, U. S. Public Health Service

The role of the general practitioner in the prevention and amelioration of chronic disease and disability in industry has marked social and economic overtones. Striking during the productive period of life, chronic diseases are estimated to cause more than a billion days of lost time each year. The general practitioner's burden of responsibility can be eased, however, by utilizing the resources available in the community and in industry for the early detection and management of chronic disease. These aides are available in four major areas: the prevention of exposures and conditions of work which may lead to chronic diseases, the proper placement of workers to avoid the aggravation of existing chronic diseases, the provision of preventive health services in industry for early detection, and the rehabilitation and restoration of the disabled patient to as productive and full a life as possible.

Various chronic diseases are known to be associated with specific occupational exposures. In the respiratory disease group, for example, are silicosis and silicotuberculosis, asbestosis, and bagassosis. For assistance in making a differential diagnosis, when the occupation may be implicated, the general practitioner should turn to the industrial physician, or, if none, to the official occupational health agency in his State, for expert advice on the substances and processes used in that particular industry. The industrial physician is also an invaluable ally of the general practitioner in the early referral of workers found to be suffering from non-occupational chronic diseases and in the proper job placement of such individuals. For the more advanced cases, requiring restoration, rehabilitation facilities lend further effective support to the general practitioner in helping his patient achieve maximum function. The experience of work classification centers gives abundant evidence that it is possible for a majority of chronic disease victims to lead productive, useful lives when they are placed in suitable jobs and are under a proper medical regimen.

11:30 "CHEMOTHERAPY OF RENAL TUBERCULOSIS"

JOHN K. LATTIMER, M.D., New York, New York

Professor of Urology, Columbia University College of Physicians and Surgeons; Director, Urological Service. Presbyterian Hospital, N. Y. C.; Director, Squier Urological Clinic; Director, Research Unit for Genito-Urinary Tuberculosis, Kingsbridge Veterans Administration Hospital

Renal tuberculosis is a lethal form of the disease which is now successfully treated with combinations of antituberculosis drugs. Medical treatment has been so successful that nephrectomy and partial nephrectomy are rarely necessary. Four, five and ten year follow-up statistics will be presented on patients treated with combinations of Streptomycin, PAS and Isoniazid.

12:00 END OF FIRST ASSEMBLY

WEDNESDAY NOON
September 26, 1956

12:00 noon to 1:00 p.m.

Discussion Conference

Grand Ballroom, Sheraton-Cadillac Hotel

Leader: HAROLD C. MACK, M.D., Detroit
Participants: OTIS ANDERSON, M.D., Washington, D. C.; JOHN P. CAFFEY, M.D., New York, New York; EDWIN J. DECOSTA, M.D., Chicago, Illinois; FRANCIS R. KEATING, JR., M.D., Rochester, Minnesota; JOHN K. LATTIMER, M.D., New York, New York, PERRY S. MACNEAL, M.D., Philadelphia, Pennsylvania; SEWARD E. MILLER, M.D., Washington, D. C.; and SOMERS H. STURGIS, M.D., Boston, Massachusetts.

HOTEL RESERVATIONS

for the

91st ANNUAL SESSION

MSMS

should be made

NOW

WEDNESDAY AFTERNOON
September 26, 1956

Second Assembly

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: BERNARD BERNBAUM, M.D., Detroit
Secretary: J. F. HARROLD, M.D., Lansing

P.M.
2:00 "INFANTILE CORTICAL HYPEROSTOSIS; THE CHRONIC AND THE PRENATAL TYPES"

JOHN P. CAFFEY, M.D., New York, New York

Professor of Radiology, College of Physicians and Surgeons, Columbia University; Radiologist to Babies and Presbyterian Hospitals and the Vanderbilt Clinic

The clinical and radiographic features of infantile cortical hyperostosis have become well known during the last eleven years. All of the early cases were relatively mild; the disease appeared to be self limited and recovery complete. With more experience chronic and recurring cases are being met with and there have been several deaths. One of the cardinal features of the disease has been the early onset, always prior to the sixth month of life. During the last three years, several cases have been identified in utero. This discussion will be directed chiefly to the findings in prenatal and in chronic types of the disease. The therapeutic values of corticotropin will also be emphasized.

2:30 "PSYCHOSOMATIC ASPECTS OF GYNECOLOGY"

SOMERS H. STURGIS, M.D., Boston, Massachusetts

Clinical Professor of Gynecology, Harvard Medical School; Surgeon (Gynecology), Head of Department, Peter Bent Brigham Hospital, Boston; Consultant in Gynecology, Children's Medical Center, Boston

In the past fifty years, tremendous strides have been made in various aspects of the specialty of gynecology, more particularly in the endocrine, surgical and psychiatric knowledge of causes for and treatment of women's diseases. Today it is not sufficient to be a specialist in only one of these important facets of this specialty. Today gynecologists and obstetricians must recognize their responsibility in the state of health of the women of this country and the stability, or lack of it, that American women must provide for the American family unit.

In the office practice of gynecology a minority of patients are those who present themselves needing the expert care of a pelvic surgeon. Another minority also present endocrine problems that demand a knowledge of the interaction of the hormones that play upon the reproductive organs. Yet, almost every woman who seeks the advice of a gynecologist presents emotional overtones and psychological manifestations of difficulties focused on the reproductive function. It thus becomes more important perhaps than any other feature of the training of our gynecologists of the future to give them an awareness of the connotations and implications of this in dysfunctions and disorders of the reproductive tract.

Case reports are presented to illustrate the complexity of these problems in which psychological difficulties are combined in various ways with endocrine or surgical factors the satisfactory resolution of which demands, above all, an awareness of the overwhelming importance of psychological factors in gynecologic disease.

3:00 INTERMISSION TO VIEW EXHIBITS

4:00 "THE THYROID GLAND IN PREGNANCY"

EDWIN J. DECOSTA, M.D., Chicago, Illinois

Attending Obstetrician and Gynecologist, Passavant Memorial Hospital; Associate Professor, Obstetrics and Gynecology, Northwestern University Medical School

Any discussion of the thyroid gland with relation to obstetrical and gynecological problems must consider

both hypo- and hyperfunction. A great deal has been written on the subject over a period of many years but much remains to be said.

It is generally accepted that the ten-fold frequency of toxic goiter in the female, when compared to the male, and the so-called physiological enlargement of the thyroid at puberty, during pregnancy and at the menopause, are indicative of an intimate relationship between the thyroid and reproductive endocrine systems. The time-honored and frequent use of thyroid extract in the treatment of menstrual abnormalities and infertility indicates acceptance of therapeutic value. But is this so? Actually there is little to indicate that thyroid extract has any merit in the euthyroid individual. In fact, there is the suggestion that the use of thyroid extract in normal individuals may be harmful and undesirable. On the other hand, frank hypothyroidism is considered a legitimate indication for specific thyroid therapy.

The diagnosis of abnormalities of thyroid function depends largely upon the history and physical findings, confirmed by one or more of the following laboratory studies: (1) basal metabolic rate, (2) determination of the protein bound iodine of the plasma, and (3) determination of radioactive iodine absorption by the thyroid gland or that excreted from the body.

Menstrual disorders do occur in association with both hyper- and hypofunction. Most often hyperthyroidism is associated with oligomenorrhea or amenorrhea while hypothyroidism, in contradiction to the teaching of many, seems to be associated most frequently with excessive menstrual flow. Both conditions respond to proper therapy when the thyroid gland is the cause of the abnormality.

In considering the effects of the thyroid on gestation, several interesting questions arise. If pregnancy has been achieved in the face of hypothyroidism, is the administration of thyroid extract of any danger to the fetus? If pregnancy and hyperthyrodism coexist, can antithyroid drugs be used? What about I^{131}, or should the patient be carried with iodine until after delivery? Do these drugs have untoward effects on either the fetus or mother? Do the thiouracils cause goiter in the newborn? Will I^{131} given the mother produce a cretin as it does in dogs? Will therapeutic doses of iodine injure the fetal thyroid? Is surgery preferable to medicinal therapy during pregnancy, and if so, under what circumstances?

One could go and on—what, for example, is the effect of pregnancy on precipitating or even causing thyrotoxicosis? These and other questions will be discussed and answered as far as current knowledge permits.

4:30 "CHRONIC DISEASE, A CHALLENGE TO THE MEDICAL PROFESSION"

OTIS ANDERSON, M.D., Washington, D. C.

Assistant Surgeon General and Chief of the Bureau of State Services, U. S. Public Health Service

The medical profession has been profoundly influenced by the tremendous strides that have been made during the past half century in scientific research in its broadest sense. In a rapidly changing environment it is difficult to assess the respective roles of all who must contribute to today's health needs. Each must be appraised if we are to chart a true course ahead.

We must recognize the difference between the major health problems with which we are now confronted and those which concerned us but a few years ago.

The acute illnesses have been replaced by chronic illness and disability as the major health problem of the Nation. This transition is due largely to the progress that has been made in improved preventive health practices, both clinical and public health.

This shift has profound implications for the medical and other health professions. The division between preventive, curative, and restorative services is difficult to define. These services extend into the socio-economic fields.

Prevention to the extent possible, both with regard to occurrence and progression of chronic disease, is inherent in the basic approach to the problem. We may legitimately question the full utilization of knowledge available to us today in accomplishing the above objectives.

Organized community planning becomes important to the recognition and full use of existing community services and development of other necessary services to supplement and assist the practicing physician in the care of his patient. Our traditional practice of each specialist working more or less independently needs objective scrutiny—no doubt modification.

5:00 END OF SECOND ASSEMBLY

— Program of Sections —

WEDNESDAY AFTERNOON

September 26, 1956

SECTION ON GENERAL PRACTICE

Meeting—5:00 to 6:00 p.m.—English Room

Reception: 6:00 p.m.—Book Casino
Dinner—7:00 p.m.—English Room

Chairman: J. E. WENTWORTH, M.D., Flint
Secretary: F. P. RHOADES, M.D., Detroit

"OFFICE MANAGEMENT OF DIABETES MELLITUS"

PERRY S. MACNEAL, M.D., Philadelphia, Pennsylvania

An attempt at good chemical control of every patient with diabetes mellitus should be made with great care, both on the part of the physician and the patient in an effort to minimize the occurrence of the untoward late complications of this disease. The objects of satisfactory control of the diabetic patient are:

1. Maintenance of normal body weight
2. Maintenance of normal blood sugars
3. Avoidance of glycosuria
4. Avoidance of ketonuria
5. Avoidance of hypoglycemia
6. Reasonable adjustments to the requirements of the patient's way of life.

Not all of these goals can be achieved in every case since, in certain severe unstable cases, compromises may have to be made in the interests of practicability. The majority of the patients with diabetes mellitus (that large group of patients who are overweight and who do not lose weight under the influence of their diabetes alone) can be satisfactorily managed without insulin by the simple expedient of reducing their weight to normal by dietary means. Those patients who require insulin (children with diabetes, adults who are underweight at the time they develop diabetes, adults who have lost weight below their ideal standard body weight under the influence of their diabetes alone) can be satisfactorily controlled in almost all instances by appropriate management of the diet, both in reference to its total content and its division and spacing throughout the day. The availability of insulins with different timing of activity makes this goal more likely of achevement. Simple procedures for the office management of the patient with diabetes will be discussed in detail.

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SECTION ON OBSTETRICS AND GYNECOLOGY

Meeting—5:00 to 6:00 p.m.—Sheraton Room

Chairman: H. B. RICE, M.D., Detroit
Secretary: J. H. BEATON, M.D., Grand Rapids

"DIABETES AND PREGNANCY"

EDWIN J. DECOSTA, M.D., Chicago, Illinois.

In considering the management of the pregnant diabetic patient, we must be guided by certain general principles. Diabetes is a serious medical problem which requires good medical judgment and care. The pregnancy requires good obstetrical judgment and care. Frequently the care of these patients will fall to two or more physicians, the internist, the obstetrician, and the pediatrician, who work closely together. It must be emphasized, however, that while such a team is desirable, it is not a necessity.

The presence of diabetes should not interdict pregnancy unless the diabetes is associated with advanced vascular changes and kidney damage. In spite of efficient care, experience indicates that problems may arise which are somewhat proportional to the severity and duration of the disease and the co-operation of the patient.

Whether or not hormonal therapy is indicated is still a debatable question. But assuming that its most

important indication lies in brittle juvenile diabetes, it seems unwarranted to advocate the general use of hormones for all diabetic patients since severe diabetes is rarely encountered. In addition, the cost of such therapy makes its application practically prohibitive. The use of hormones in the management of the diabetic patient therefore is not advocated nor has experience indicated any necessity for its use.

Our policy involves careful management, aiming to maintain the patient so that there will be no symptoms of diabetes, weight gain will be normal, the patient will feel well, and acidosis, coma and insulin reaction will rarely occur. If these conditions are met, there is no objection to the patient passing moderate amounts of sugar. Hospitalization is necessary only with refractory diabetes, for the treatment of complications, and for preparation prior to delivery. Insulin, either long-acting or regular, is given as indicated.

It is believed that the gestation should be terminated when the baby weighs approximately 3500 grams. This weight is often reached in the diabetic patient by the thirty-sixth to thirty-seventh week of gestation. The actual method of terminating the pregnancy will vary with the conditions encountered at that time. Cesarean section is frequently employed, particularly where the cervix is long and closed and the presenting part high.

In spite of the best of care, abortion, hydramnios, fetal oversize, prenatal and neonatal death, and toxemia of pregnancy will occur more frequently in the diabetic patient.

With the delivery of the baby, problems still exist. Although often large, the baby is not necessarily robust. It is essential to maintain clear respiratory passages, to keep the baby warm, to provide an adequate amount of oxygen, and to administer small amounts of glucose solution or dilute milk at frequent intervals.

SECTION ON OCCUPATIONAL HEALTH

Meeting—5:00 to 6:00 p.m.—Room 907

Dinner—6:30 p.m.—Room 907

Chairman: C. D. Selby, M.D., Port Huron

Secretary: O. J. Johnson, M.D., Bay City

"CURRENT TRENDS IN OCCUPATIONAL HEALTH"

Seward E. Miller, M.D., Washington, D. C.

The changing character and scope of industrial health programs have been largely dictated by the prevailing social concepts of industry's role and responsibility for worker health. Thus, the early industrial health services were primarily based upon medical care for industrial illness and injuries and the prevention of accidents and occupational diseases. As industry has come to recognize the importance of conserving the total health of the worker to keep him on the job, industrial health services are becoming increasingly oriented to the early detection and prevention of *all* diseases—not only those related to the occupation. The need for broad preventive services and health maintenance programs is being accentuated by the advancing age level of the working population and the rising incidence of chronic and degenerative diseases.

Recently, there has been a growing trend to utilize more fully the opportunity afforded by the preplacement and the periodic health examinations for promoting and maintaining the health of the worker. This is achieved not only through the early detection of incipient developing disabilities, but also by helping the worker solve his health and emotional problems through health education, counseling, and appropriate utilization of community and social resources. Corollary to this trend, there has been a move toward special education and training in health maintenance and occupational diseases for industrial physicians and nurses with emphasis on the preventive aspects.

Another development in the industrial health field which holds great promise is the variety of efforts being carried on to find ways and means of providing health services to workers in small plants. Such services are still not available to about 70 per cent of our working population. How to economically and effectively bring medical and nursing services to the workers in small establishments represents one of the greatest present challenges in the field of occupational health. To date, three general types of industrial health programs for small plants have evolved: (1) community-sponsored programs, (2) co-operative programs, and (3) individual programs.

With the increasing emphasis on nonoccupational health measures, however, care must be taken to avoid complacency toward the safety and industrial hygiene aspects of industrial preventive health services. New materials and processes are being introduced daily into industrial establishments. Physicians and nurses must know the health hazards involved and work closely with the industrial hygienist to carry out their joint responsibility in protecting the worker's health.

SECTION ON PEDIATRICS

Meeting—5:00 to 6:00 p.m.—Pan American Room

Dinner—6:30 p.m.—Pan American Room

Chairman: Bernard Bernbaum, M.D., Detroit

Secretary: C. E. Booher, M.D., Grand Rapids

"PREDISLOCATION PHASE OF CONGENITAL DISLOCATION OF THE HIP"

John P. Caffey, M.D., New York, New York

The current preventive practices for congenital dislocation of the hip, use of the Frejka pillow splint and the Hass bar, are based on the hypothesis that the predislocation phase can be identified radiographically by the demonstration of high acetabular angles in combination with limitation of abduction and external rotation. The size of the acetabular angles, measured radiographically in 1500 unselected newborns will be presented with follow-up radiographic measurements in the same infants at six months and twelve months of age. These findings indicate a wide variation in the size of the acetabular angles in healthy infants; approximately 50 per cent of white girl infants show angles greater than 29 degrees, the value which has been widely used as the upper limit of normal. The findings in this group, by far the largest unselected infant population tested for size of the acetabular angles, demonstrate that the predislocation phase of congenital dislocation of the hip is being diagnosed too frequently and unnecessary preventive measures are being applied to healthy infants, in large numbers.

SECTION ON PUBLIC HEALTH AND PREVENTIVE MEDICINE

Meeting—5:00 to 6:00 p.m.—Room 807

Dinner—6:30 p.m.—Room 807

Chairman: V. K. Volk, M.D., Saginaw

Secretary: J. D. Monroe, M.D., Pontiac

"CHRONIC DISEASE, A CHALLENGE TO PUBLIC HEALTH"

Otis Anderson, M.D., Washington, D. C.

Improvement in the general health of the Nation's population and the increased longevity associated with it are responsible for the transition which public health practice has been undergoing during recent years.

Of importance today, is the recognition that chronic disease—frequently causing long-term illness and disability—represents a major health problem. Admittedly, much research needs to be done to further the progress of community application of chronic disease control practices. However, within the limits of our present knowledge, there is still much that can be done.

Positive community action will be required to supply the wide range of services necessary to prevent the occurrence or progression of chronic disease and disability.

The public health agency has a vital role in bringing together all forces of the community which can contribute to these services, in providing leadership in planning for their best utilization, and in furnishing some of the services needed. Services for the private physician must be supported by those of the laboratory, the hospital, the rehabilitation facility, and a number of related services. Nursing care is needed in the hospital and in the home. Physical therapy, nutritional advice, and medical social services must be arranged for. Many of these special services can be provided by the health department. Others can more appropriately be arranged for from other sources. In either event, active participation by the public health team will be called for.

State and local health departments should include in their planning a study of this problem and how they can best make their contribution.

SECTION OF UROLOGY

Meeting—5:00 to 6:00 p.m.—Parlors G and H

Dinner—6:30 p.m.—Parlors G and H

Chairman: J. F. Harrold, M.D., Lansing
Secretary: H. V. Morley, M.D., Detroit

"RETROPUBIC RADICAL PROSTATECTOMY FOR CANCER"

John K. Lattimer, M.D., New York, New York

The retropubic (or suprapubic) radical prostatectomy can be easily accomplished by any surgeon versed in this approach to the Prostate. The incidence of postoperative incontinence may be lower than from perineal radical prostatectomy. Radical removal of the early carcinoma of the prostate is the only curative maneuver presently available in the treatment of this disease. Technical means of making the operation easier will be shown in lantern slides and in a motion picture of the operation.

WEDNESDAY EVENING

September 26, 1956

Officer's Night

Grand Ballroom, Sheraton-Cadillac Hotel

President: W. S. Jones, M.D., Menominee
Secretary: L. Fernald Foster, M.D., Bay City

P.M.

6:30 Officers' Night Reception

7:15 Officers' Night Banquet, honoring Officers of the Michigan State Medical Society and its Woman's Auxiliary (Informal)

8:30
1. Announcements and reports of the House of Delegates by L. Fernald Foster, M.D., Secretary
2. Induction of New Officers
3. President's Annual Address by W. S. Jones, M.D.
4. The Andrew P. Biddle Lecture



Andrew P. Biddle. M.D.
(Deceased August 2, 1944)
Patron of Postgraduate Medical Education

5. Presentation of Biddle Lecture Scroll

10.00 6. Adjournment

THURSDAY MORNING

September 27, 1956

Third Assembly

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: E. T. Thieme, M.D., Ann Arbor
Secretary: C. H. Ward, M.D., Detroit

A.M.

9:00 Surgery Panel on "THYROID DISEASES"
Moderator: Frederick A. Coller, M.D., Ann Arbor

Professor of Surgery and Chairman of the Department, University of Michigan
Participants:

Dwight E. Clark, M.D., Chicago, Illinois
Professor of Surgery; Senior Attending Surgeon, Albert Merritt Bellings, Hospital of the University of Chicago Clinics; Secretary, Department of Surgery

E. Perry McCullagh, M.D., Cleveland, Ohio
Head of Department of Endocrinology and Metabolism, Cleveland Clinic

James H. Means, M.D., Boston, Massachusetts
Physician, Massachusetts Institute of Technology; Jackson Professor of Clinical Medicine, Harvard; Emeritus Honorary Physician, Massachusetts General Hospital

10:00 INTERMISSION TO VIEW EXHIBITS

11:00 "INDICATIONS FOR TRACHEOTOMY"

G. Slaughter Fitz-Hugh, M.D., Charlottesville, Virginia

Professor and Chairman, Department of Otolaryngology, School of Medicine, University of Virginia; Otolaryngologist-in-Chief, University of Virginia Hospital

The author has been following the trends in the use of and indications for tracheotomy, under various conditions, since 1940. Initially, the procedure was performed, in the vast majority of instances, for the relief of obstruction in the upper respiratory tract at the laryngeal level. In this earlier group of cases, a high percentage (40 per cent) were performed in patients of two years and younger.

In the succeeding interim and particularly in recent years, the indications for tracheotomy have broadened in scope tremendously. Much of the impetus to this increase in indications has been secondary to the work of Galloway, Priest, Bower, Cummings, and others, in their studies of the respiratory problems of poliomyelitis.

One now recognizes the value of tracheotomy in relieving, less dramatically, respiratory distress and complications following abolition of the cough mechanism and the resulting accumulation of fluid in the lower respiratory tract. Emphasis in this particular presentation is placed on the physiologic disturbances which will be detrimental to the patient as the result of this type of obstruction in the respiratory tract.

The number of patients in this lower respiratory obstruction group, having tracheotomy, are now, in our experience, in the majority, and, as one would expect, are predominantly adults.

It behooves all practicing physicians in any phase of medicine to be aware of the value of tracheotomy or the alternative methods of preventing and relieving the accumulation of fluid in the tracheobronchial tree.

Brief observations are made in regard to the contraindications to, complications of, and substitutes for tracheotomy.

The following classification is utilized in presenting the indications for tracheotomy.

1. Fixed obstruction to the upper airway. (Rapid obvious anoxia).
2. Fluid obstruction to lower airway. (Slow obscure anoxia).
3. Prophylactic. (To prevent 1 and/or 2.)
4. Spasm (*per se*—questionable indication).

11:30 "THE CYSTIC OVARY—SURGICAL OR NON-SURGICAL?"

JOHN R. SCHENKEN, M.D., Omaha, Nebraska

Pathologist and Director of Laboratories, Nebraska Methodist Hospital and Children's Memorial Hospital, Omaha, Nebraska; Professor and Chairman, Department of Pathology, University of Nebraska College of Medicine, Omaha

Coe in 1887 commented on the diagnosis of ovarian disease, that "What has been said regarding the variations in size, shape, and external appearance, it may be inferred that there are many opportunities for error." Warnings of this type have been repeatedly recorded by physicians who are interested in ovarian pathology. The purpose of this study was to review some of the problems of the cystic ovary as viewed by the pathologist and to determine whether the differentiation of the diseased from the non-diseased cystic ovary in situ is more skillfully made by a jury of specialists or by a jury of non-specialists.

An analysis was made of 793 diseased ovaries which had been removed surgically. Fifty per cent of these were found to be non-neoplastic, a high percentage of which showed endometriosis. Our chief interest was to discuss the differentiation between neoplastic and non-neoplastic cystic ovary, with general comments as to the outlook in the neoplastic group.

We also studied the effect of an educational program during a six-year period through the medium of medical students, interns, residents, medical staff, and non-euphemistic reporting of normal structures in the ovary. We were gratified to learn from our data that both the specialist and the non-specialist showed sharp improvement in his ability to detect a diseased from a non-diseased cystic ovary, and that in the entire group, only one unnecessary castration was carried out. There was, likewise, an increasing number of instances when only a portion of the ovary was submitted for examination instead of an entire ovary.

We were forced to conclude that the impact of forthright reporting of normal tissues and the sympathetic understanding of the problems involved, on the part of pathologists, were responsible for this improvement in detecting diseased ovarian tissue and this was accomplished without the benefit of the public castigation of the physician through lay publications.

12:00 END OF THIRD ASSEMBLY

THURSDAY NOON
September 27, 1956

12:00 noon to 1:00 p.m.

Discussion Conference

Grand Ballroom, Sheraton-Cadillac Hotel

Leader: FREDERICK A. COLLER, M.D., Ann Arbor

Participants: DWIGHT E. CLARK, M.D., Chicago, Illinois; RICHARD C. CONNELLY, M.D., Detroit, Michigan; G. SLAUGHTER FITZ-HUGH M.D., Charlottesville, Virginia; JOHN W. HENDERSON, M.D., Ann Arbor Michigan; M. RALPH KAUFMAN, M.D., New York, New York; ALFRED M. LARGE, M.D., Detroit, Michigan; E. PERRY MCCULLAGH, M.D., Cleveland, Ohio; JAMES H. MEANS, M.D., Boston, Massachusetts; H. MARVIN POLLARD, M.D., Ann Arbor, Michigan; JOHN R. SCHENKEN, M.D., Omaha, Nebraska; LEON SCHIFF, M.D., Cincinnati, Ohio; THEODORE F. SCHLAEGEL, Jr., M.D., Indianapolis, Indiana; and WARREN E. WHEELER, M.D., Columbus, Ohio

THURSDAY AFTERNOON
September 27, 1956

Fourth Assembly

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: R. C. CONNELLY, M.D., Detroit
Secretary: WADSWORTH WARREN, M.D., Detroit

P.M.
2:00 WILLIAM BEAUMONT, M.D. LECTURE
(Sponsored by the Michigan Foundation for Medical and Health Education, Inc.)
"CLUES AND PITFALLS IN THE DIAGNOSIS OF JAUNDICE"

LEON SCHIFF, M.D., Cincinnati, Ohio

Professor of Clinical Medicine, University of Cincinnati Medical School; Director, Gastric Laboratory, Cincinnati General Hospital

Valuable clues in the diagnosis of the cause of jaundice are the age of the patient, history of exposure to known hepatotoxic agents, history of alcoholism, history of previous biliary tract surgery or resection of a malignant tumor, the presence of splenomegaly, a typical laboratory "profile" of obstructive jaundice, x-ray findings of gall stones or peri-ampullary tumor, et cetera.

Paradoxically, these clues may of themselves occasionally prove misleading. In addition constitutional hepatic dysfunction may be mistaken for hepatitis, intrahepatic cholestasis for extra hepatic obstruction, infectious mononucleosis for infectious hepatitis, etc. Numerous examples will be given and the means of avoiding some of these pitfalls pointed out.

2:30 "THE ETIOLOGY AND DIAGNOSIS OF ENDOGENOUS UVEITIS"

THEODORE F. SCHLAEGEL, JR., M.D., Indianapolis, Indiana

Assistant Professor of Ophthalmology, Indiana University Medical Center; Director of Research, Department of Ophthalmology, Indiana University Medical Center

Ophthalmologists and other physicians have been repeatedly frustrated over the years by attempts to find foci of infection and other signs of disease in patients with uveitis. These frustrations have led to doubts as to the value of a general physical check up in uveitis patients. Although there is strong evidence that various bacteria and parasites are important agents in the production of uveitis, preliminary studies have indicated that uveitis may *also* be a stress disease.

So far we have correlated two main types of stress with the onset of uveitis. These two factors which seem to be active in precipitating attacks of uveitis are fatigue and increased responsibility. The patient may be fatigued from working at two jobs, getting drunk every night, or by continuing to work when debilitated by virus pneumonia.

Increased responsibility has been observed in many forms. In 3 of a series of 12 patients it consisted of the extra load of buying a new home. Other patients are plagued by increased responsibility in the form of a promotion on the job, the invasion of one's home by the extra mouths of hungry relatives, or by the coming of a new baby to add weight to responsibilities already too heavy to bear.

In our experience the ferreting out of such factors as fatigue and increased responsibility and their proper handling may be of more value than many of the standard procedures. One patient failed to improve from any type of therapy but did improve as soon as he was changed to a less responsible position. The physician should insist that the uvetitis patient be absolved from all duties he can shed and should see to it that the patient receives adequate rest, both mentally and physically. It is of value for the physician to temporarily "mother" or "baby" the patient, hospitalization is especially recommended for then the patient can feel free to shed his cares and regress.

3:00 INTERMISSION TO VIEW EXHIBITS

4:00 "BACTERIAL DISEASE IN THE NEWBORN"

WARREN E. WHEELER, M.D., Columbus, Ohio

Professor of Pediatrics and Bacteriology, Ohio State University

The two most important epidemic diseases of newborn infants are impetigo and epidemic diarrhea of the newborn. Both of these are caused by strains of common bacteria, Staphylococcus aureus and Escherichia coli (colon bacillus) respectively. These bacteria are ubiquitous in the environment and are harbored by normal healthy adults. Meticulous aseptic nursery technique can be relied upon to minimize the transfer of these organisms to newborn babies and perhaps to delay the colonization of the infants by them. However, it is normal for tiny babies to acquire staphylococci on the skin and in the nose and throat and E. coli on the skin and in the intestines.

Fortunately, only rare strains of these organisms produce manifest disease in infants. Such strains are endowed with special properties of invasion and pathogenicity so that when an infant is colonized disease may be produced—if not immediately, then some time later when the baby's resistance has been reduced by some unrelated incident.

Recent experience emphasizes that these pathogenic strains are widespread in their distribution. Epidemiologic studies with such strains, especially staphylococci, have brought forth new concepts of the usual pathways of transmission of such organisms and measures necessary to control their spread. These newer concepts will form the basis of the presentation.

4:30 "PSYCHOTHERAPIES IN A GENERAL HOSPITAL"

M. RALPH KAUFMAN, M.D., New York, New York

Psychiatrist to the Hospital; Director, Department of Psychiatry, The Mount Sinai Hospital; Clinical Professor of Psychiatry, P&S, Columbia University; President, Medical Board of Mount Sinai Hospital and Chairman of its Committee on Medical Education

Psychotherapy in various forms is inherent in the art of the practice of medicine. The understanding and utilization of the patient-physician relationship is of paramount importance. This fact has implications for the training of the medical student, intern, and resident. Psychiatry in this sense has become a basic science in the same way as physiology. Psychotherapy in its various forms, however, is a technical instrument, and therefore there can be no profession of psychotherapist as such, since a profession must have within itself the full potential for the management of all the varied problems that arise in its practice.

The treatment of patients involves a continuing diagnostic acumen with the necessary flexibility for whatever treatment emphasis becomes necessary at any given time. Such continuing responsibility for a patient can only be the responsibility of a physician. A split between psyche and soma runs contrary to all present day concepts of the integration and function of the organism that is the patient. This is true even though the practice of medicine at the present time is divided into major areas of specialization. Nevertheless, each practitioner in addition to the special training and skills in a particular area still has the total responsibility for the individual. This responsibility may be discharged in many ways including the collaborative working with other members of the medical profession and adjuvant professions. The psychiatrist as a member of the medical profession has developed refinements of diagnosis and therapeutic skills which makes him the elective physician for certain types of problems which fall within the range of the specialty of psychiatry.

The paper deals with the kind of psychotherapeutic opportunities and practices that are available to a psychiatrist functioning within the framework of a general hospital, both in relation to patients who are directly in his charge and, collaboratively, with patients of other physicians functioning in the hospital.

5:00 END OF FOURTH ASSEMBLY

——Program of Sections——

THURSDAY AFTERNOON

September 27, 1956

SECTION ON GASTROENTEROLOGY AND PROCTOLOGY

Meeting—5:00 to 6:00 p.m.—English Room

Reception and Dinner—6:30 p.m.—Statler Hotel

Chairman: R. C. CONNELLY, M.D., Detroit

Secretary: NORMAN D. NIGRO, M.D., Detroit

PANEL ON "MEDICAL AND SURGICAL PROBLEMS OF LIVER DISEASE"

Moderator: RICHARD C. CONNELLY, M.D., Detroit, Michigan

Clinical Associate Professor of Medicine, Wayne University College of Medicine; Attending Physician, Harper and Bon Secours Hospitals

LEON SCHIFF, M.D., Cincinnati, Ohio

H. MARVIN POLLARD, M.D., Ann Arbor

Professor of Internal Medicine, University of Michigan Medical School

ALFRED M. LARGE, M.D., Detroit

Assistant Professor of Clinical Surgery, Wayne University College of Medicine; In Charge of the University Surgical Service, Grace Hospital, Detroit; Surgical Consultant, Dearborn Veterans Administration Hospital and U.S.P.H.S. Hospital, Windmill Point, Michigan; Attending Surgeon, Bon Secours Hospital, St. John Hospital; Associate Surgeon, Detroit Receiving Hospital.

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SECTION ON NERVOUS AND MENTAL DISEASES

Meeting—5:00 to 6:00 p.m.—Pan American Room

Dinner—6:30 p.m.—Pan American Room

Chairman: C. H. WARD, M.D., Detroit

Secretary: R. W. CAVELL, M.D., Ann Arbor

"THE PROBLEM OF PSYCHIATRIC SYMPTOM FORMATION"

M. RALPH KAUFMAN, M.D., New York City

The problem of psychiatric symptom formation will be presented from a point of view which will attempt to relate psychic symptoms and signs within the general framework of medicine. Scientific medicine is firmly based on a biological orientation. Psychiatry is a branch of medicine. Therefore, any attempt to understand psychiatric symptom formation must relate essentially to the understanding of the symptom formation in any of the other areas of medicine. Since there are fundamental biological laws, any explanation of symptom formation regardless of the nature of the symptom must be within the sphere of biology. Therefore, from this point of view, fever and phobia must qualitatively serve a similar biological function in relation to the adaptation of the organism.

Particular emphasis will be placed on the contribution of psychoanalysis to this problem.

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SECTION ON OPHTHALMOLOGY

Meeting—5:00 to 6:00 p.m.—Sheraton Room

Dinner—6:30 p.m.—Sheraton Room

Chairman: C. W. LEPARD, M.D., Detroit

Secretary: B. C. WILDGEN, M.D., Muskegon

"THE DIAGNOSIS OF FUNCTIONAL VISUAL FIELD DEFECTS"

THEODORE F. SCHLAEGEL, JR., M.D., Indianapolis, Indiana

Visual fields studies should be started on a tangent screen and carried out in a clockwise or counter-clockwise manner and not by the checking of opposite ends

of a single diameter or by the checking of various areas in a random fashion. It is necessary to use such a clockwise or counter-clockwise technique to demonstrate spiral fields when they are present. Such fields will spiral down towards the fixation point as one proceeds around the tangent screen in either direction.

The tubular fields of hysteria are diagnosed easily from the following criteria:

1. The fields are the same size no matter what the distance.
2. The borders are very sharp no matter what the size of test object.
3. The field is circular in shape.

In my experience tubular fields are usually about 1 foot in diameter or about the size of the 10 degree circle at one meter. If the fields are not contracted, they are not tubular. If they are contracted, one should test with a larger test object such as an 8 by 12 inch sheet of paper. If the fields remain contracted to the same circle on the tangent screen with this large test object, the patient should be moved back to two meters and rechecked. If the size of the field remains at the same place on the tangent screen, the diagnosis of tubular fields of hysteria is clinched.

Other hysterical visual field defects such as hysterical hemianopsia and hysterical central scotoma may be diagnosed by use of the first two criteria mentioned. These hysterical defects will be of the same size no matter what the distance and the borders will be sharp no matter what the size of test object.

SECTION ON OTOLARYNGOLOGY

Meeting—5:00 to 6:00 p.m.—Parlors G and H

Chairman: Wadsworth Warren, M.D., Detroit

Secretary: J. M. LaBerge, M.D., Wyandotte

"TEMPORAL BONE SURGERY: A SURVEY AFTER THE ADVENT OF THE MANY ANTIBACTERIAL AGENTS"

G. Slaughter Fitz-Hugh, M.D., Charlottesville, Virginia

A survey of the quantity and types of temporal bone surgery, performed in a relatively small general hospital (University of Virginia) since the availability of the many successful antibacterial agents, has been made. In the analysis of groups of such surveys from various areas throughout the country, one may obtain interesting data in regard to the trends in Otology, the material available for training residents, and possibly some ideas as to the demands for otologists in the major surgical field.

As all are aware, there has been a tremendous decrease in the necessity for temporal bone surgery as the result of bacterial infection or suppurative ear disease. However, in turn there has been an increase in temporal bone surgery for non-suppurative conditions, with the hope of restoring hearing, improving balance and facial movements, and controlling neoplasms. That this increase is proportional or more than proportional, as has been noted in certain areas, can be determined only by surveys such as the one presented.

One fact seems certain, that even though the number of dangers, resulting from otological infections requiring surgery, has markedly diminished, they are still ever present and serious. Some one must be available to cope with the various surgical conditions. Also, with the release of the otologist's time from the care of the infections, this has in turn provided him with time for the development of surgical technique beneficial to non-infectious, pathological conditions so plaguing to the population, such as deafness, tinnitus, vertigo, and so forth.

"ETIOLOGY OF POST- MENOPAUSAL BLEEDING—A SURVEY BASED UPON AN ANALYSIS OF PATHOLOGIC LESIONS FOUND IN THE GENITAL TRACT"

John R. Schenken, M.D., Omaha, Nebraska

Practically all surveys on the subject of post-menopausal uterovaginal bleeding which have been reported in the literature have been based on the analyses of the findings as revealed from a clinical approach through office, clinic, and hospital material.

This analysis was based on the examination of 300 consecutively received specimens which were from women over 55 years of age, and which presented one or more pathologic lesions which could or did produce bleeding. This type of survey excludes all problems of bleeding caused by blood dyscrasias, ovarian tumors, and the like.

We found that 30% of these specimens revealed a malignant tumor as the cause of the bleeding. This is in contrast to the wide variations from about 16 to 87% which has been reported in the literature. Each of the surveys in the literature is subject to special interpretation since those that are made from private practice generally show a much lower incidence of malignancy than those from a free charity clinic which show a much higher incidence, despite the fact that the medical service is free. The results of our survey emphasize the fact that the major cause of post-menopausal bleeding is not malignancy, and that every effort should be made to establish the etiology before hysterectomy or radium implantation is carried out. Our survey also revealed the fact that there were many instances of co-existing multiple lesions, each of which was capable of producing bleeding. Hence, the simple removal of an endocervical polyp or the like cannot be justified without the investigation of the possible more serious source of hemorrhage in the uterine cavity.

SECTION ON SURGERY

Meeting—5:00 to 6:00 p.m.—Grand Ballroom

Chairman: E. T. Thieme, M.D., Ann Arbor

Secretary: H. M. Bishop, M.D., Saginaw

"THE PROBLEM OF PROGRESSIVE EXOPHTHALMUS IN THYROID DISEASE"

John W. Henderson, M.D., Ann Arbor, Michigan

Associate Professor of Ophthalmology, University of Michigan

The problem of progressive exophthalmos associated with thyroid disease will be discussed. The current trend is to consider progressive exophthalmos a separate entity with or without associated thyrotoxicosis. The lack of correlation between thyrotropin levels and active proptosis, as well as failure of thyroid medication to uniformly halt the process cast doubt on traditional concepts. Recent reports suggest the possibility of a separate exophthalmos-producing hormone as a causative factor.

THURSDAY EVENING

September 27, 1956

State Society Night

Grand Ballroom, Sheraton-Cadillac Hotel

P.M.
10:30 An evening of entertainment for all registrants, ladies and guests

Cabaret-style Dance and Floor Show

Host: Michigan State Medical Society

(Admission by card furnished to all upon registration)

ONLY ONE MORE DAY TO VISIT YOUR MANY FRIENDS IN THE EXHIBIT

FRIDAY MORNING

September 28, 1956

Fifth Assembly

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: O. S. Hendren, M.D., Pontiac

Secretary: H. V. Morley, M.D., Detroit

A.M.

9:00 **"PROLONGED LABOR"**

LeRoy A. Calkins, M.D., Kansas City, Kansas

Professor and Chairman of the Department of Obstetrics and Gynecology, University of Kansas Medical School.

The definition of prolonged labor is still to be decided. When labor starts is still disputed. The difference between "false" labor, "prodromal" labor and very early "slow" starts is so minimal that hours of *close* observation are required in making the only possible differential diagnosis.

The time-honored management of "watchful expectation," ample fluid intake, and indicated sedation and rest periods is still to be recommended. When we are dealing with a normally soft cervix, this treatment can still be confidently advised. If, however, the cervix is firmer than is usual, this method of management can lead to bad results in a surprisingly large percentage of patients.

In order properly to diagnose this firmness of cervix (13 per cent of primigravida and 3 to 4 per cent of multigravida), one must palpate it at the height of a good uterine contraction. This is often impossible early in labor when the contractions are relatively weak or when (as is very frequently true in multigravida) the internal os is undilated but the external os is soft and considerably dilated. In other words, the presenting part must be in contact with the external os, and the examination must be made at the height of a relatively good contraction.

If, under these circumstances, either of these two conditions is existent, (1) the cervix tends to soften as dilation progresses, (2) the uterine contractions tend to increase in frequency and intensity, nothing need be feared.

If, however, the cervix remains firm up to 6 cm. dilation *and* the uterine contractions remain weak and far apart, a high fetal mortality can be expected. Fortunately, this combination of events is not particularly common but still too frequent for comfort. To determine it requires close and continued observation. Proper management will be discussed.

9:30 **"SOME ASPECTS OF DIAGNOSIS OF LUNG TUMORS AND CANCER"**

Averill A. Liebow, M.D., New Haven, Connecticut

Professor of Pathology, Yale University; Pathologist-in-Chief, Grace-New Haven Community Hospital, University Services

From the standpoint of treatment, the important cancer is the cancer that has not metastasized. Despite occasional notable successes, survey films have been disappointing. The difficulty is that large cancers may be silent. On the contrary, small tumors may produce serious symptoms, but these are often neglected by the patient, or misinterpreted by the physician. It is the responsibility of the general practitioner to bring these lesions to early diagnosis and treatment. Any man over forty-five with symptoms of thoracic disease who has been a heavy smoker should be a suspect. It must be remembered that, with early bronchogenic carcinoma, one sees the result of the tumor rather than the tumor itself in roentgen films. Therefore, specialized radiographical methods such as body section and bronchography, bronchoscopic and cytological methods should be employed without delay.

Among the common symptoms are the appearance, increase, or alteration in character of cough; chest pain or discomfort; expectoration; hemoptysis; dysynea; evidence of bronchial stenosis or obstruction such as wheezing; or signs of pneumonitis. Among the later manifestations are evidences of involvement of other thoracic structures, such as vocal cord paralysis, Horner's syndrome, superior caval obstruction, or dysphagia. The appearance of metastatic tumor in distant organs or tissues may, unfortunately, precede the signs of the disease in the chest.

A simple classification may be made according to predominant cell type:

A. Bronchogenic carcinoma
 1. Epidermoid carcinoma
 2. Anaplastic carcinoma
 3. Adeno carcinoma
 4. Mixed type

B. Bronchiolar carcinoma ("Pulmonary Adenomatosis," "Alveolar cell carcinoma.")

Epidermoid carcinoma accounts for between 45 per cent and 60 per cent of all bronchogenic tumors and tends to predominate in the male in the ratio variously stated as 10:1 to 20:1. The peak age incidence is at sixty, later than that of other bronchogenic cancers. There is radiographic evidence that some, at least, may develop very slowly, over four or five years. Most of these tumors involve major bronchi, in bulk, but some are largely mucosal in position, resembling granulation tissue. Both types often are associated with a pneumonitis, or bronchiectasis distally that accounts for much of the symptomatology. Many bronchogenic epidermoid tumors cavitate but can often be distinguished from true abscess by the absence of an appropriate history, in the relatively old age group involved, in the fact that they do not necessarily lie in the "path of aspiration," in their relatively thick irregular walls, and notched outlines. Some of these tumors occur peripherally: A lung tumor that invades the body wall is more likely to be a well differentiated squamous cell tumor than any other type. Spread to lymph nodes usually occurs slowly, at first by direct invasion. Hematogenous metastases are late, but may be widespread when pulmonary veins are involved.

Anaplastic carcinoma: Among the anaplastic tumors are the so-called oatcell tumors, but others are more differentiated and tend to approach the epidermoid type. Male predominance is even higher, but relatively more occur below the age of 40. Most of these tumors involve the stem or lobar bronchi. They quickly involve nodes so that the hilar mass becomes continuous with the mediastinal metastases, and there is also extention peripherally in "sunburst" arrangement. Hematogenous metastases are also frequent and may constitute the first clinical sign of the disease. Necrosis is rarely sufficient to result in radiographically demonstrable cavitation.

Adenocarcinoma: Approximately 15 per cent of bronchogenic carcinomas are of mucus producing glandular type. Although still predominantly a disease of the male, this tumor is the most common type in women. Although most of these lesions are hilar, relatively more occur peripherally than with the other histological types. When cavities occur, they tend to be small. Growth is relatively rapid as compared with squamous carcinoma and metastases tend to be widespread, involving chiefly the blood stream, although lymphatic pathways are not neglected.

Bronchiolar carcinoma: These are very peripherally situated lesions, not associated with any major bronchi, having a varying structure, often observed within the confines of the same tumor, from very well differentiated to definitely adenocarcinomatous structure. Grossly, two main varieties exist, a multi-nodular form resembling matastatic tumor, and a pneumonia-like, vaguely outlined form, occuring singly or in the form of scattered lesions. This lesion often develops almost asymptomatically, although it may follow what seems to be a pneumonic episode. Although abundant mucoid sputum is characteristic, this actually occurs relatively uncommonly. Many of these lesions are entirely silent clinically, and are detected only by routine radiographic examination. If sputum exists, cytological examination is very helpful in establishing a diagnosis. When the lesion occurs as a single focus considerable success has been attained in treatment, even by lobectomy. Many, however, tend to spread, largely by lymphatics, but also perhaps by transbronchial aspiration to other foci within the lung. Most patients die of replacement of pulmonary substance by neoplastic tissue. Approximately 50 per cent of these tumors remain confined within the thorax, without metastasis elsewhere. Others metastasize widely.

Until methods of curative radiotherapy or chemotherapy are discovered, it would seem best to treat the bronchogenic carcinomas as radically as compatible with sufficient residual pulmonary function. The value of prophylactic resection of draining lymph nodes in the mediastinum *en bloc* with the primary tumor has not been established, although suggested. Transection of veins intrapericardially, and the inclusion of the pulmonary ligament in the resection is probably desirable in view of the close relationship of the bronchi and nodes to these structures.

10:00 **INTERMISSION TO VIEW EXHIBITS**

11:00 "THE ART OF TOPICAL THERAPY"

HERBERT S. RATTNER, M.D., Chicago, Illinois

Professor and Chairman, Department of Dermatology, Northwestern University; Chief Editor, AMA Archives of Dermatolgy

The Art of Topical Therapy will consider when, where and why to use the various topical agents such as wet dressings, shake lotions, ointments, pastes, etc.; which drugs to use under these different circumstances; and an appraisal of the various topical steroid preparations that are available on the market. Exemplary lantern slides will be presented.

11:30 "MILKERS' NODULES"

EDWARD P. CAWLEY, M.D., Charlottesville, Virginia

Professor and Chairman, Department of Dermatology, University of Virginia School of Medicine

Milkers' nodules is an unique disease characterized by the appearance of inflammatory nodules on the exposed skin of persons who milk cows. The disorder in humans has been reported from six states in the U.S.A. (Iowa, Delaware, Virginia, Tennessee, Louisiana and Minnesota) and has been encountered in at least two more states (Michigan and Wisconsin) from which formal reports have not been made. There is reason to believe that the geographic distribution is more widespread than these data would indicate, and that the disease is far from rare.

Milkers' nodules sometimes occurs in epidemic form in large herds of milk cows. A few animals are involved at a given time and the disease passes slowly through the herd until it finally dies out. Milkers' nodules also appears in sporadic outbreaks on farms where a single cow or a small herd is kept. The disease in the cow is characterized by several lesions on the teats and udders, but the cow is not systemically ill.

Milkers' nodules in humans is a self limited, inflammatory cutaneous lesion (or lesions) which goes through macular, papular, vesicular and crusted stages and heals without scar formation in from four to eight weeks. The uncomplicated disease is productive of few local symptoms and the patient shows no evidence of systemic involvement.

Attempts to transmit milkers' nodules to experimental animals using material from lesions on humans or cows have resulted in failure but a number of clinical and epidemiological features suggest that milkers' nodules is an infectious disease with a low degree of infectiousness and a high degree of dermatropism.

Various features of milkers' nodules, including epidemiology, clinical aspects, pathology and treatment will be described.

12:00 END OF FIFTH ASSEMBLY

FRIDAY NOON

September 28, 1956

12:00 noon to 1:00 p.m.

Discussion Conference

Grand Ballroom, Sheraton-Cadillac Hotel

Leader: HAROLD HENDERSON, M.D., Detroit

Participants: KENNETH E. APPEL, M.D., Ardmore, Pennsylvania; EDWARD P. CAWLEY, M.D., Charlottesville, Virginia; LEROY A. CALKINS, M.D., Kansas City, Kansas; JACK M. KAUFMAN, M.D., Detroit, Michigan; AVERILL A. LIEBOW, M.D., New Haven, Connecticut; GEORGE R. MENEELY, M.D., Nashville, Tennessee; JOHN M. MURPHY, M.D., Detroit Michigan; O. SIDNEY ORTH, M.D., Madison, Wisconsin; CHARLES A. POINDEXTER, M.D., New York, New York; MYRON PRINZMETAL, M.D., Beverly Hills, California; and HERBERT S. RATTNER, M.D., Chicago, Illinois

FRIDAY AFTERNOON

September 28, 1956

Sixth Assembly

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: E. O. PEARSON, M.D., Kalamazoo

Secretary: B. B. BLUM, M.D., Petoskey

P.M.

2:00 "MEDICAL AND PSYCHIATRIC COLLABORATION—IMPORTANCE AND POSSIBILITY"

KENNETH E. APPEL, M.D., Ardmore, Pennsylvania

Professor of Psychiatry, Chairman of the Department, School of Medicine, University of Pennsylvania

The Concepts of Mental Health and Mental Illness

What is mental health? Not merely the absence of nervousness, tension, anxiety, discouragement and guilt.

What is mental illness? Not just the absence of health.

The importance of mental illness for the physician and the community.

The general practitioner, internist, surgeon, pediatrician are necessary in psychiatry. At times they have been of more help than the psychiatrist.

Ways of collaboration. Opportunities for the non-psychiatrist in the treatment of mental illness and preservation of mental health.

KENNETH E. APPEL M.D.

Professor of Psychiatry and Chairman of the Department, University of Pennsylvania

2:30 "PHYSICIAN ALERTNESS TO ALTERED PHYSIOLOGY DURING ANESTHETIZATION"

O. SIDNEY ORTH, M.D., Madison, Wisconsin

Professor and Chairman, Department of Anesthesiology, University of Wisconsin Medical School

All drugs used to produce anesthesia (local or general agents) are toxic! The very nature of the actions desired in their use is evidence of this fact. In the course of the desired actions on various organs of the body such as analgesia, unconsciousness, depression of reflexes, muscular relaxation, etc., undesired, unanticipated, and unrecognized side effects may occur with resultant marked alteration in physiological functions and possibly great danger or serious effects for the patient.

The medically trained individual who uses anesthetic agents, constantly should be on the alert to counter all possible physiological changes they produce. Early warning signs such as diminished tidal exchange and minute volume should be met by assisted or augmented respiratory exchange; respiratory obstruction whether due to secretions, relaxed tongue, foreign body, or pathological tissue should be corrected immediately. Cardiac rate and rhythm should be observed continuously and any changes evaluated, as should elevations or depressions of blood pressure. Blood and fluid loss should be equated, with replacement as indicated. Abolition of protective reflexes should be recognized and respected.

The prompt and efficient recognition and treatment of factors of physiological alteration will:

1. Greatly enhance the safety of the patient.
2. Permit more rapid and better surgical interventions.
3. Probably contribute to a more rapid and pleasant convalescence.

Attention to seemingly minor factors early in their origin may prevent major physiological upsets in the course of anesthetic administrations!

3:00 FINAL INTERMISSION TO VIEW EXHIBITS

3:30 "CROSS COUNTRY PANEL ON CARDIOVASCULAR DISEASES"

Moderator: JOHN M. MURPHY, M.D., Detroit, Michigan

Physician, Department of Cardiology, Harper Hospital; Senior Physician and Chief of Medical Department, St. John Hospital; Physician, Medical Department, Bon Secours Hospital; Fellow American College of Physicians; Fellow American College of Cardiology; Diplomate American Board of Internal Medicine.

ARTHUR C. CORCORAN, M.D., Cleveland, Ohio
Vice Chairman, Research Division, Cleveland Clinic

GEORGE R. MENEELY, M.D., Nashville, Tennessee

Associate Professor of Medicine, Vanderbilt University School of Medicine and Associate Professor of Clinical Medicine and Cardiology, Meharry Medical College

CHARLES A. POINDEXTER, M.D., New York, New York

Professor of Medicine, New York University Postgraduate Medical School; Chief Division of Cardiology, N. Y. University-Bellevue Medical Center; Consultant in Cardiology, St. Francis Hospital, Port Jervis, N. Y.; Elizabeth A. Horton Hospital, Middletown, N. Y., Tuxedo Memorial Hospital, Tuxedo Park, N. Y., Phelps Memorial Hospital Association, N. Y., and Goshen Hospital, Goshen, N. Y.

MYRON PRINZMETAL, M.D., Beverly Hills, California

Associate Professor of Medicine, University of California School of Medicine at Los Angeles; Senior Attending Physician at Cedars of Lebanon Hospital; Chief of Cardiology, City of Hope Hospital, Duarte, California; Member of Heart Council, U.S.P.H.S., Bethesda, Maryland; Editorial Board, American Heart Journal, Heart Bulletin and Disease of the Month

5:00 END OF SIXTH ASSEMBLY

Program of Sections

FRIDAY AFTERNOON

September 28, 1956

SECTION ON ANESTHESIOLOGY

Meeting—5:00 to 6:00 p.m.—Parlors G-H-I

Chairman: F. E. GREIFENSTEIN, M.D., Detroit

"SINGLE VERSUS MULTIPLE AGENTS FOR ANESTHETIZATION"

O. SIDNEY ORTH, M.D., Madison, Wisconsin

The popular present-day tendency in general anesthetic administrations is to use a multiplicity of agents whether they be a mixture of several gaseous agents, several volatile agents, several intravenous agents, or a combination of several of these groups of agents! From the widespread present-day usage of multiple anesthetic agents it is obvious that in many, many instances very satisfactory results can be obtained. The question is being raised with increasing frequency, however, as to whether such mixtures are the safest for the patient. When untoward effects occur can we assess quickly which agent is at fault and eliminate its actions? It is relatively certain that we cannot, or frequently that there is disguise of such effects, and serious to fatal consequences may arise. The supposition that "all the advantages and none of the disadvantages are obtained by multiple agents" might with equal logic be given the reverse twist of "all the disadvantages without the advantages"! Statistics so far available support this latter interpretation. A plea is made for he use of individual agents where very specific need for several agents is not present. It is axiomatic that one or two drugs can be understood or respected better than a pot-like mixture. The general trend in medical therapy in the 20th century has been for the use of specific and minimal drugs rather than generalized mixtures. Is our specialty to be an exception?

SECTION ON DERMATOLOGY AND SYPHILOLOGY

Meeting—5:00 to 6:00 p.m.—Pan American Room

Chairman: OWEN S. HENDREN, M.D., Pontiac

Secretary: COLEMAN MOPPER, M.D., Detroit

"NEW, NEWER, AND NEWEST IN DERMATOLOGY"

HERBERT S. RATTNER, M.D., Chicago, Illinois

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SECTION ON MEDICINE

Meeting—5:00 to 6:00 p.m.—Grand Ballroom

Chairman: R. A. GERISCH, M.D., Detroit

Secretary: BENJAMIN B. BLUM, M.D., Petoskey

"CURRENT STATUS OF THE PREGNANT CARDIAC"

JACK M. KAUFMAN, M.D., Detroit

Assistant Professor, Physical Diagnosis and Internal Medicine, University of Detroit Dental School, Receiving Hospital, Wayne University College of Medicine

The physiology of changing blood volume, cardiac output, and heart work is discussed in relation to pregnancy. Citing our own cases and from data accumulated from various workers in the field the following conclusions are arrived at: (1) Risk of pregnancy in most cardiacs is minimal when proper cardiac care is instituted. (2) Cyanotic and congenital heart disease is no longer contra-indication to pregnancy. (3) Therapeutic abortion for cardiac reasons is no longer tenable. (4) Patients who have had cardiac surgery including mitral commissuratomy, pulmonary valvulotomy and Blaloch-Taussig operations are capable of having a low risk pregnancy.

In those cases where therapeutic abortion would formerly have been considered, mitral commissuratomy or other cardiac surgery can be safely performed during pregnancy. The risk to the fetus is practically nil and the risk to the mother is not much higher than therapeutic abortion.

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SECTION ON PATHOLOGY

Meeting—3:00 p.m.-5:00 p.m.—English Room
Cocktails—6:00 p.m.; Dinner—7:00 p.m.; Business Meeting—8:00 p.m.—English Room.

Chairman: C. ALLEN PAYNE, M.D., Grand Rapids

"A SLIDE SEMINAR ON DISEASES OF LOWER RESPIRATORY TRACT"

AVERILL A. LIEBOW, M.D., New Haven, Connecticut.

P.M.

6:00 END OF SCIENTIFIC ASSEMBLY AND OF THE 1956 ANNUAL SESSION.

Annual Reports

ANNUAL REPORT OF INDUSTRIAL HEALTH COMMITTEE—1955-1956

The committee continued the four objectives of activity adopted last year to improve the relationship of medicine to industry.

Members of the committee participated in the sessions of the AMA Congress on Industrial Health and the arrangements therefore held in Detroit in January 1956.

A well attended meeting of the Committee was held in Detroit on January 22, 1956. Several nationally prominent physicians in this field attended and contributed greatly to the deliberation.

At this meeting a subcommittee was appointed to draw up a Medical Plan for Small Plants utilizing physicians in private practice. After such a plan is formulated and approved it is to be used to stimulate improved industrial health programs throughout the state. This to be done by local medical societies.

The committee will undertake to stimulate interest in this field at the annual meeting of MSMS through the newly established Section on Occupational Health.

Respectfully submitted,

O. J. Johnson, M.D., *Chairman*
O. J. Preston, M.D., *Vice Chairman*
S. E. Andrews, M.D.
J. D. Beall, M.D.
T. I. Boileau, M.D.
H. S. Brown, M.D.
M. R. Burnell, M.D.
W. P. Chester, M.D.
E. B. Cudney, M.D.
E. A. Irvin, M.D.
M. W. Jocz, M.D.
D. F. Kudner, M.D.
V. S. Laurin, M.D.
E. F. Lutz, M.D.
C. P. McCord, M.D.
G. P. Moore, M.D.
R. D. Mudd, M.D.
P. J. Ochsner, M.D.
H. A. Pinkerton, M.D.
D. M. Richmond, M.D.
N. W. Scholle, M.D.
M. W. Shellman, M.D.
S. D. Steiner, M.D.
A. J. Swingle, M.D.
C. D. Selby, M.D., *Advisor*

ANNUAL REPORT OF THE TUBERCULOSIS CONTROL COMMITTEE—1955-1956

The Committee met on November 30, 1955. The principal items brought up for discussion before the Committee were as follows:

Tuberculosis Circular for General Practitioners: The Chairman and Committee members reaffirmed that much of the future effectiveness in tuberculosis case finding and treatment will depend upon the general practitioner in Michigan and other physicians in private practice. The pamphlet, "Drugs in the Treatment of Tuberculosis" prepared by the Joint State Committee on Tuberculosis, was approved for distribution.

Mr. Werle, Secretary of the Michigan Tuberculosis Association, reported that the Board of Directors of that association had agreed to underwrite the cost of printing and folding of these leaflets, providing the mailing services of the M.S.M.S. were available. The Committee expressed their thanks to the Michigan Tuberculosis Association for their offer to aid in the distribution of this pamphlet. Subsequent to the meeting of the Committee, this pamphlet has been distributed to the physicians throughout the state.

Proposed State Tuberculosis Control Budget: Dr. Heustis, Commissioner of Health, presented the 1956-57 budget requests for the tuberculosis control program of the Michigan Department of Health. The proposed 1956-57 budget totaled $8,305,061 including $140,223 for case finding and case holding activities, $2,298,338 for subsidy of state-at-large tuberculosis patients and $5,866,500 for state subsidies to local health departments and sanatoriums, administered by the Michigan Department of Health.

The Committee discussed the budget at length, emphasizing the principles involved more than the actual amounts of money requested. It was agreed that the budget request was too detailed and far-reaching for proper appraisal within the time limits of this Committee meeting. It was agreed that Dr. Heustis should submit summary copies of the budget proposal to Committee members for their study and comment.

Tuberculosis Sanatorium Bed Study: Dr. Hofstra and Dr. Heustis distributed preliminary reports on the utilization of tuberculosis hospital beds in Michigan. Dr. Hofstra explained that the pattern of hospitalization was governed by: (a) the proximity of available facilities, (b) the patient's choice, (c) the necessity of hospitalizing patients outside the area of residence due to lack of available beds, and (d) the willingness of the patient to accept hospitalization at any facility. He also emphasized that utilization of available beds was dependent upon (1) case finding and (2) the ability to motivate persons with active tuberculosis to accept hospitalization.

It was pointed out by Dr. Heustis that the tuberculosis case load in southeastern Michigan does not appear to be dropping, although the load is gradually declining in other areas of the state. A preliminary draft of this survey report ended with the following recommendations: (1) That excess beds be used for treatment and care of diseases which will permit flexibility of the utilization and of the beds to meet varying and largely unpredictable demands of tuberculosis, (2) That all areas of Michigan be provided with at least minimum facilities to maintain adequate tuberculosis control, including outpatient and diagnostic services, (3) That southeastern Michigan be encouraged to continue to use beds available in other areas until such time as the need for such beds no longer exists in southeastern Michigan.

Tuberculosis Education for General Practitioners: The Committee recognized the increasing dependency upon general practitioners for tuberculosis case finding. Ways and means to stimulate the interest of the general practitioner in the differential diagnosis of diseases in the chest were discussed.

It was agreed that a handbook of chest diseases containing x-ray illustrations would be highly valuable and the Committee recommends that the MSMS sponsor the production and distribution in serial form of a chest disease atlas for use by general practitioners and other doctors of medicine as an aid in the differential diagnosis of diseases of the chest, with an understanding that $10,000 for such a project is available from the Michigan Tuberculosis Association. It is further recommended that the M.S.M.S. undertake the responsibility for the preparation of such an atlas and its mailing to members of the M.S.M.S. It is planned to have the initial distribution consist of a loose-leaf binder with probably 40 or 50 various chest disorders with accompanying descriptive material. Subsequent serial addi-

tions would in time make this a valuable x-ray atlas on diseases of the chest.

New Tuberculin: The State Health Commissioner distributed samples of the new strength tuberculin, namely, 1-3300, and briefly explained the new improved product. It was agreed that the Committee recommend that an article be prepared for an early issue of THE JOURNAL of the MSMS by the Michigan Department of Health concerning the new tuberculin available from the State Health Department and its use in the private office of the doctor of medicine in Michigan.

X-Ray Survey Project in Southeastern Michigan: Plans for a mass x-ray survey to be conducted in southeastern Michigan, in June, 1956, were discussed. It was agreed by the Committee that recognizing that the 70 mm x-ray is a screening device for detecting tuberculosis, and recognizing that the effectiveness of a mass survey is better served by making a 14 x 17 film where there is a suspicion of chest disease so that such suspected disease may be better identified in the screening process.

Mr. Werle, Secretary of the Michigan Tuberculosis Association, reported that there had been a greater response by county medical societies to the offer of the Michigan Tuberculosis Association to supply tuberculosis speakers to county society meetings at no cost to the county society.

Among the guests present at the Committee meeting were: State Senator Creighton Coleman; Mr. Theodore J. Werle, Executive Directive of the Michigan Tuberculosis Association; Mr. Tilden B. Mason, Senior Research Associate of the Citizens Research Council of Michigan, and Mr. Aaron Englisher, of Public Administration Service, Chicago, Director of a current survey on tuberculosis and mental health being made for the Michigan Legislature at the direction of the Senate Finance Committee.

The hospital problem relative to the mental patients in Michigan was discussed freely by the Committee members and guests. Various viewpoints on the use of current tuberculosis facilities for housing the mentally retarded were expressed, but no definite action was taken by the Committee; still it was generally agreed that out of the free discussion came a better understanding of the problem by all persons concerned.

J. W. TOWEY, M.D., *Chairman*
W. B. HOWES, M.D., *Vice Chairman*
P. T. CHAPMAN, M.D.
W. N. DAVEY, M.D.
J. L. EGLE, M.D.
L. R. NELSON, M.D.
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C. J. STRINGER, M.D.
KIYO TASHIRO, M.D.
S. A. YANNITELLI, M.D.
G. T. MCKEAN, M.D., *Advisor*

ANNUAL REPORT OF IODIZED SALT COMMITTEE—1955-1956

Our educational program has been continued and enlarged in scope. Dr. Richard Waggoner of St. Louis, Michigan, has developed a motion picture depicting the importance of iodized salt in the prevention of goiter. The movie includes scenes of the Michigan Salt Company of St. Louis and the school children being examined for goiter. Dr. Robert Moehlig is working with Dr. Waggoner on the completion of this movie and it will then be available for use throughout the state.

Dr. Waggoner attended the meeting of the American Salt Producers Association in an attempt to impress upon them the great opportunity they have to benefit the health of this nation by putting a small amount of iodine in all food salt.

Dr. Moehlig reported on the increased incidence of multiple sclerosis in endemic goiter areas, also the incidence of cretinism and other mental deficiencies.

The expanding educational program is being carried out to keep the importance of purchasing iodized salt before the homemaker and grocery buyer.

A communication was received from The Child Welfare Committee urging that all food salt in Michigan be iodized. This was discussed by the Committee and it was moved that our Committee endorse this motion and the similar proposal of the American Public Health Association Committee for Endemic Goiter that all food salt in the United States be iodized.

Word was received that the Executive Committee of our State Society adopted a motion "that the Michigan State Medical Society favor any method, short of compulsory legislation, to promote greater use and manufacture of iodized salt."

Our educational program is bearing excellent results in our state and we are striving to keep it at its present high level of effectiveness.

A meeting was held February 28, 1956.

Respectfully submitted,
B. E. BRUSH, M.D., *Chairman*
H. A. TOWSLEY, M.D., *Vice Chairman*
L. A. BERG, M.D.
J. B. BLODGETT, M.D.
J. R. CARNEY, M.D.
R. C. MOEHLIG, M.D.
R. L. RAPPORT, M.D.
J. M. SCHROEDER, M.D.
R. L. WAGGONER, M.D.

ANNUAL REPORT OF THE MEDIATION COMMITTEE—1955-1956

During this time there have been no complaints submitted to the Committee and there have been no meetings held.

Respectfully submitted,
RALPH WADLEY, M.D., *Chairman*
L. R. LEADER, M.D., *Vice Chairman*
D. R. BOYD, M.D.
A. E. GAMON, M.D.
W. Z. RUNDLES, M.D.
R. W. TEED, M.D.
CHARLES TEN HOUTEN, M.D.

ANNUAL REPORT OF CHILD WELFARE COMMITTEE—1955-1956

The Child Welfare Committee of the Michigan State Medical Society and its subcommittees present herewith a brief summary of its activities for the past year:

The General Committee considered and recommended to the Michigan State Medical Society subjects relative to the general medical welfare of the children in the State of Michigan: school health problems, oxygen in the care of prematures, poliomyelitis vaccine, the handicapped child, and means of extending the activities of the Committee to the County Medical Society level.

To facilitate functioning of the general Committee, it was also recommended that this Committee consist of the Chairman, a representative of the State Health Department and the Michigan Crippled Children Commission, and the chairman of several subcommittees. The possibility of expanding its activities through more subcommittees was explored.

The Subcommittee of Ophthalmologists reviewed problem of prophylaxis for eyes of newborn and recommended that the present Michigan law not be changed. The Subcommittee also made suggestions concerning visual requirements for pre-school and school

(Continued on Page 886)

John A. MacCartney

President, American Pharmaceutical Association

When John A. MacCartney took over the job as President of the American Pharmaceutical Association at its 103rd Annual Convention in Detroit last April, his friends confidently predicted that Mr. MacCartney would be the most active president in the history of the A.Ph.A. . . . and he is off to a flying start.



In his inaugural address, he emphasized the part that pharmacy has played in the progress of medical care, and stressed the need for harmony and co-operation with "other members of the health team." He outlined the need for a hard hitting public relations program and urged American pharmacists to co-ordinate their efforts "toward the ultimate goal that the public will accept and approve the retail drug stores of this country as the logical outlet for the products of the drug industry," not by "blind dependence on legal restrictions" but by conducting the profession in such a manner that the public "approves and prefers us because they want to, not because they have to." He immediately set about to put his ideas into action.

Mr. MacCartney, Professional Relations Manager for Detroit's Parke-Davis & Company since 1946, and associated with that pharmaceutical firm for twenty-seven years, already is well-known to many members of MSMS.

Born fifty years ago in Claysville, Pennsylvania, "Mac" MacCartney has literally been associated with the pharmaceutical business all his life. He "learned the hard way," starting in his earliest years by mopping the floors and washing the bottles in the drugstore operated by his father in Claysville for fifty years.

Following his graduation from the University of Pittsburgh College of Pharmacy in 1928, he joined the sales force of Parke-Davis, soon becoming a medical service representative with headquarters at Erie, Pennsylvania. From 1935 to 1942, his headquarters were at Rochester, New York, before he received a call to active duty with the Army. His war record included two years in the Pacific area, much of it with the 77th Infantry Division in the Philippine and Okinawa campaigns. Later he served as Chief of Medical Supply for the U. S. Military Government in Korea. He holds the rank of lieutenant colonel.

Mr. MacCartney already is widely known for his work in the field of public relations and trade relations in pharmacy and medicine. As a traveling ambassador for Parke-Davis, he has spoken before hundreds of meetings of pharmaceutical and medical groups. His duties also include supervision of the Parke-Davis professional visitor program in which the company plays host to 10,000 physicians, dentists, hospital personnel and related groups each year on a ten-mile tour of the Parke-Davis laboratories in Detroit. He is also in charge of the Company's exhibits at such meetings as the MSMS annual session, the Michigan Clinical Institute, and other professional conventions and meetings throughout the nation.

Mr. MacCartney's leadership should further strengthen the bond between the 30,000 members of A.Ph.A. and the members of medical organizations in this nation, a goal which MSMS has been encouraging on a statewide level with great success during the past few years.

A RESEARCH MILESTONE

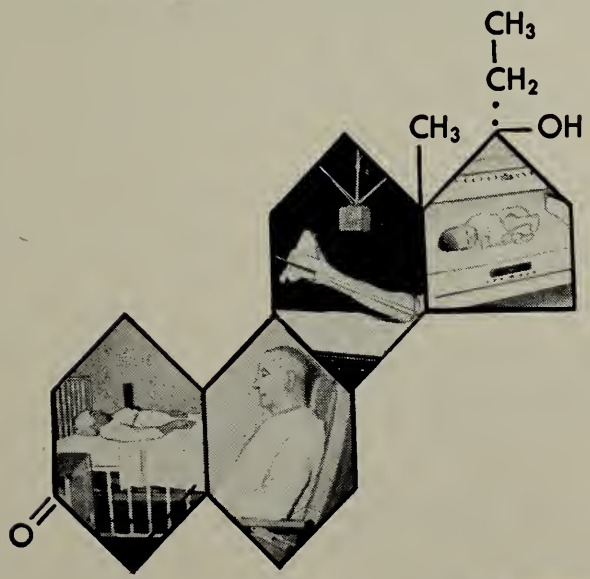
Nilevar*

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Searle's New and Practical Steroid Specifically for Protein Anabolism—

It has long been recognized that a substance which would promote protein anabolism would be of inestimable value in therapy. The androgens have this property, but unfortunately they also exert actions on secondary sex characteristics. These effects are commonly undesirable in therapeutic programs.

THE FIRST STEROID WITH ANABOLIC SPECIFICITY—Nilevar, the newest Searle Research development, therefore, meets a long desired clinical need because Nilevar presents the first steroid primarily anabolic for protein synthesis. Moreover, Nilevar is without prominent androgenic effects (only about one-sixteenth of that exerted by the androgens).



OBJECTIVE AND SUBJECTIVE RESPONSE — Orally effective, Nilevar therapy is characterized by retention of nitrogen, potassium, phosphorus and other electrolytes in ratios indicative of protein anabolism. Moreover, subjectively the patient observes an increase in appetite and sense of well-being.

WELL TOLERATED—Nilevar has an extremely low toxicity. Laboratory animals fail to show toxic effects after six months of continuous administration of high dosages. Nilevar should not be administered to patients with prostatic carcinoma. Nausea or edema may be encountered infrequently. Slight androgenicity may be evidenced on high dosage or in particularly responsive individuals.

MAJOR INDICATIONS—Preparation for and recovery from surgery; supportive treatment of serious illnesses (pneumonia, poliomyelitis, carcinomatosis, tuberculosis); recovery from severe trauma and burns; decubitus ulcers; care of premature infants.

DOSAGE—The daily *adult* dose is three to five Nilevar tablets (30 to 50 mg.) but up to 100 mg. may be administered. For *children* the average daily dose is 1 to 1.5 mg. per kilogram of body weight; individual dosages depend on need and response to therapy.

SUPPLY—Nilevar is available in uncoated, unscored tablets of 10 mg. G. D. Searle & Co., Research in the Service of Medicine.

*Trademark of G. D. Searle & Co.

SEARLE

Say you saw it in the Journal of the Michigan State Medical Society

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

LEGISLATION OF PUBLIC HEALTH SIGNIFICANCE

A number of measures enacted by the 1956 Legislature are of concern to public health.

Appropriations; Public Health.—Grants to counties were increased from $325,000 to $400,000. Appropriations for tuberculosis case finding were increased from $175,000 to $250,000. A sum of $14,119 was appropriated to execute the newly assigned responsibility for Act 139, namely, the special program of licensing of nursing homes and homes for the aged (P.A. 219).

Poliomyelitis Vaccine.—The 1955 appropriation of $2,000,000 for the purchase of poliomyelitis vaccine was extended for use throughout the fiscal year 1956-57. This appropriation is to be reduced by the amount of any federal money received by the State of Michigan for the purchase of poliomyelitis vaccine (P.A. 13).

Dry Cleaning Law.—Was amended to more definitely recognize the health implications of dry cleaning with certain solvents. The law as amended also allows discretion in the establishment of dry cleaning plants in buildings containing places of public assembly and provides for approval of construction items in certain types of dry cleaning establishments (P.A. 167).

Nursing Homes.—The licensing of nursing homes and home for the aged was transferred from the Department of Social Welfare to the Health Department, effective January 1, 1957. A small amount of money has been provided for this activity. The legislation makes meager reference to full time local health departments in its context (P.A. 139).

County Drain Law.—This is a codification of the county drain law. A few minor amendments were also made, one extending the life of drain bonds, one permitting the transfer of jurisdiction over a drain which lies wholly within one city or village, and one having to do with procedures where a portion of the district is in the process of incorporating as a city (P.A. 40).

Water and Sewer Law.—Amends the county water and sewer law (Act 342, P.A. 1939) to authorize two counties to join in establishing water, sewerage and garbage disposal facilities; also governs procedure where township is in process of incorporating as a city (P.A. 49).

Trailer Coach Parks.—Amends trailer coach park act with respect to collection and distribution of fees (P.A. 129).

State Milk Law.—Amends Act 169, P.A. 1929 (State Milk Law) providing for sale of milk from dairy-sealed containers, served from refrigerated bulk milk dispensers. Provides for report of location of such dispensers to Department of Agriculture, equipment to be in sanitary surroundings, served in quantities of not less than 8 ounces; each can to carry date of pasteurization (P.A. 200).

Milk.—A new act applying to production, handling and sale of Grade A milk and milk products; defines Grade A milk and establishes standards; provides for producer permits; includes powers to political subdivisions contained in Sec. 14, Act 169, P.A. 1929 (P.A. 216).

Water.—Provides authority to Water Resources Commission to foster and encourage formation of water supply and sewage disposal districts; to act as administrative agency in formation of districts, and lend assistance to directors of districts as may be appropriate; to negotiate contracts in such matters; to take advantage of any Federal legislation; to disburse moneys; to act as fiscal agent for State for making funds available to districts that may be appropriated by Legislature; to co-ordinate its duties and functions with similar duties performed by other state agencies. Provides procedures for forming such districts by two or more units of government (P.A. 211).

TRAINING COURSES FOR VISION AND HEARING TECHNICIANS

Three training courses for vision-screening technicians are scheduled for this summer. One will be held at Michigan State Normal College, Ypsilanti, from June 25 to 29. The second will be at Central Michigan College, Mt. Pleasant, July 9 to 13. The third will take place at Northern Michigan College, Marquette, July 16 to 20.

A training course for hearing-screening technicians was held at Michigan State Normal College, from June 17 to 22.

The technicians satisfactorily completing the courses will be employed locally in vision and hearing programs.

One half of all patients with ovarian cancer are hopelessly incurable when first diagnosed.

* * *

Ovarian cancer comprises 4 per cent of all cancers in women over forty.

* * *

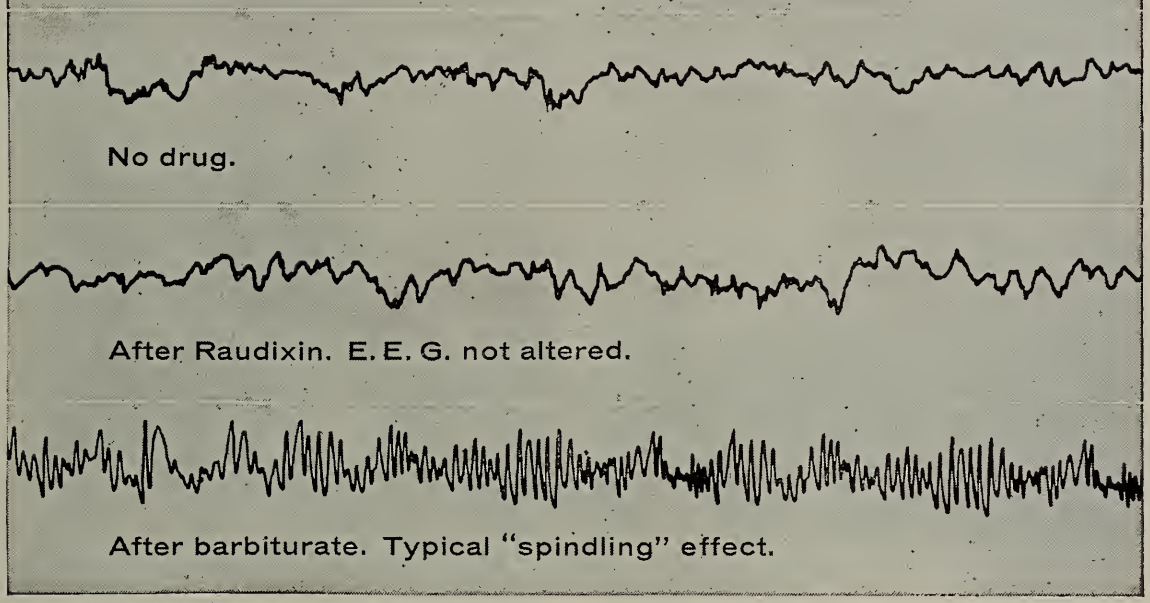
Ovarian tumors may remain entirely asymptomatic for long periods.

* * *

Eighty per cent of Krukenberg tumors are bilateral.

WHAT IS THE DIFFERENCE BETWEEN A TRANQUILIZER AND A SEDATIVE?

Comparison of the effect of Raudixin (tranquilizer) and a barbiturate (sedative) on the cortical electroencephalogram



Because barbiturates and other sedatives depress the cerebral cortex, the sedation achieved is accompanied by a reduction in mental alertness.

Raudixin acts in the area of the midbrain and diencephalon, and does not depress the cerebral cortex. Consequently, the tranquilizing (ataractic) effect achieved is generally free of loss of alertness.

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DOSAGE: 100 mg. b.i.d. initially; may be adjusted within a range of 50 mg. to 500 mg. daily. Most patients can be adequately maintained on 100 mg. to 200 mg. per day.

SUPPLY: 50 mg. and 100 mg. tablets; bottles of 100, 1000 and 5000.

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In Memoriam

R. Philip Sheets, M.D., Superintendent of Traverse City State Hospital since 1931, died March 8, 1956, at the age of sixty-three. He was born in Little Rock County, Ark.; received his M.D. degree from the University of Arkansas. He had served on the staff of Traverse City State Hospital since 1923.

Charles J. Bloom, M.D., who had practiced in Muskegon for forty-two years, died February 19, 1956, at the age of seventy-three. He was born in Sweden; received his M.D. degree at the University of Minnesota.

Donald A. Cowan, M.D., of Sault Ste. Marie, Director of the Chippewa-Luce-Mackinac Health Unit since 1948, died March 12, 1956, at the age of forty-eight. He was born in Oxford; received his M.D. degree at the University of Michigan Medical School; was intern and assistant resident in pediatrics at the University Hospital, and resident at Northern Michigan Children's Hospital, Marquette.

Sylvester Ford, M.D., Detroit radiologist, died March 11, 1956, at the age of forty-nine. He was born in Ann Arbor; graduated from the University of Michigan Medical School; served his internship at Blodgett Memorial Hospital, Grand Rapids, and Grace Hospital, Detroit. He established practice in 1931.

John E. Gleason, M.D., who practiced in Detroit for fifty-three years, died March 19, 1956, at the age of seventy-seven. He was born in Oxford, N. Y.; graduated from the University of Michigan Medical School. His specialty was eye, ear, nose, and throat.

Thomas E. Hackett, M.D., who had practiced in Jackson since 1912, died April 11, 1956, at the age of sixty-eight. He was born in Dowagiac; graduated from the University of Michigan Medical School. He was the father of Thomas L. Hackett, M.D., Jackson, and Daniel J. Hackett, M.D., Pontiac.

William L. Helkie, M.D., retired Three Oaks physician, died March 5, 1956, at the age of eighty-five. He was born in Essex County, Ontario; received his M.D. degree from Detroit Medical College; served his internship at St. Mary's Hospital, Detroit. He practiced in Three Oaks for fifty-five years until 1951. He was an Emeritus Member of MSMS.

Howard C. Jackson, M.D., of Kalamazoo, son of John B. Jackson, M.D., died March 21, 1956, at the age of forty-eight. A graduate of Harvard University Medical School, he interned at Peter Bent Brigham Hospital, Boston; held residencies in pathology and surgery at Lakeside Hospital, Cleveland, and University Hospital, Ann Arbor. He was president-elect of the Kalamazoo Academy of Medicine, and president of MSMS in 1926.

Arthur W. McGarvah, M.D., who had practiced twenty-four years in Detroit, died February 17, 1956. He was born in Windsor, Ontario; received his M.D. degree from University of Toronto; served internship at Harper Hospital and residency at Woman's Hospital, Detroit.

George F. Muehlig, M.D., lifelong resident of Ann Arbor, died March 31, 1956, at the age of sixty-seven. He graduated from the University of Michigan Medical School; had been a member of St. Joseph's Mercy Hospital staff for the past forty-four years.

Wells C. Reid, M.D., Superintendent of Goodrich General Hospital since 1919, died February 26, 1956, at the age of sixty-nine. He was born in Genesee County; received his M.D. degree at Washington University Medical School, St. Louis, Mo.

Arthur J. Reynolds, M.D., Flint physician for more than fifty years, died February 26, 1956, at the age of seventy-five. A graduate of the University of Michigan, he interned at University Hospital. He was a Life Member of MSMS.

William A. Spitzley, M.D., Detroit surgeon since 1902, died March 17, 1956, at the age of eighty-three. He was born in Detroit; received his M.D. degree at the University of Michigan. He was an author and teacher in surgery.

Karl L. Swift, M.D., of Detroit, died March 24, 1956, at the age of fifty-eight. He was born in Edmore; received his M.D. degree at Wayne University College of Medicine; was senior attending physician in general practice at Woman's Hospital.

The banking institution that makes unsecured loans to all applicants soon finds its resources exhausted and goes into bankruptcy. The private health organization that offers to meet the needs of all patients in its special category soon bankrupts its own resources and disrupts the facilities of all official welfare agencies in its field.

* * *

The provision of service to all comers in time "snowballs" to the point where it becomes impossible to satisfy all demands and results in an appeal to government agencies to take over the problem. In this way, socialism gains control.

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. NEWS MEDICAL

MICHIGAN AUTHORS

Jay P. Sanford, First Lieutenant, MC, USAR, **Philip A. Riley, Jr.**, Captain, MC, USAR and **Lester R. Sauvage**, Captain, MC, USAR, Washington, D. C., are the authors of an article entitled "Evaluation of Orlon Fabric in the Repair of Defects in the Abdominal Wall," published in *Surgery,* February, 1956. Dr. Riley will soon be associated with his father in Jackson.

Martin J. Urist, M.D., South Haven, is the author of an article entitled "The Surgical Treatment of Esotropia with Bilateral Depression in Adduction," published in AMA *Archives of Ophthalmology,* May, 1956.

J. S. DeTar, M.D., Milan, is the author of an article entitled "Modern Medical Care," published in GP, May, 1956.

Harry M. Nelson, M.D., Detroit, and **Peggy Jean Howard, M.D.**, Louisville, Kentucky, are the authors of an article entitled "Breast Cancer during Pregnancy and Lactation," published in *Clinical Medicine,* April, 1956.

W. M. Mikkelsen, M.D., H. A. Zevely, M.D., N. H. Chatelin, M.D., I. F. Duff, M.D., and **A. J. French, M.D.**, Ann Arbor, are the authors of an article entitled "A Clinicopathologic Study of Fifty Cases of "Connective Tissue Disease," published in the *University of Michigan Medical Bulletin,* April, 1956.

Christopher Deen, M.D., M.S., Detroit, is the author of an article entitled "Pathological Survey of Malignant Melanomas of the Uveal Trace Received at the Kresge Eye Institute," published in the *Kresge Eye Institute Bulletin,* Vol. VII, Number 1.

J. Chandler Smith, M.D., Saginaw, is the author of an article entitled "Superiority of Surgical Treatment of Endometrial Carcinoma," published in *The Journal of the American Medical Association,* April 28, 1956.

Leo J. Kenney, M.D., and **William R. Eyler, M.D.**, Detroit, are the authors of an article entitled "Preoperative Diagnosis of Sequestration of the Lung by Aortography," published in The Journal of the American Medical Association, April 28, 1956.

T. Francis Jr., M.D., R. F. Korns, R. B. Voight, M. Boisen, F. M. Hemphill, J. A. Napier and **E. Tolchinsky**, from the Poliomyelitis Vaccine Evaluation Centre, University of Michigan, Ann Arbor, are the authors of an article entitled "Evaluation of 1954 Field Trial of Poliomyelitis Vaccine: Summary Report," *Medical Proceedings,* 1:141-145, 1955.

J. C. Smith, M.D., Saginaw, is the author of an original article, "Superiority of Surgical Treatment of Endometrial Carcinoma," which appeared in *JAMA*, April 22, page 1460.

L. J. Kenney, M.D., and **W. R. Eyler, M.D.**, Detroit, are authors of an article which appeared in "Clinical Notes" of *JAMA*, April 28, page 1464, entitled "Preoperative Diagnosis of Sequestration of the Lung by Aortography."

D. C. Smith, M.D., and **G. C. Brown, Sc.D.**, Ann Arbor, are co-authors of an original article entitled "Serologic Response of Infants and Preschool Children to Poliomyelitis Vaccine" which appeared in *JAMA,* June 2, 1956.

James Barron, M.D., J. J. Prendergast, M.D., and **M. W. Jocz, M.D.**, all of Detroit, are authors of an article entitled "Food Pump," published in *JAMA* of June 16 under "Clinical Notes," page 621.

* * *

C. Robert Dean, M.D., Director of the Rehabilitation Institute of Metropolitan Detroit, addressed the Canadian Tuberculosis Association at its annual meeting held in Niagara Falls, Ontario, on May 18, 1956. His address concerned the integration of services within a medical rehabilitation facility to provide good patient care.

* * *

Russell S. Blanchard, M.D., physiatrist, has joined the staff of the Rehabilitation Institute as Clinical Director. Doctor Blanchard was formerly with the Department of Physical Medicine and Rehabilitation at the University of Minnesota.

* * *

The Board of the American Legion Hospital, Battle Creek, Michigan, has announced the appointment of George S. Allen, M.D., as Medical Director. Dr. Allen comes to the American Legion Hospital from Mineral Springs Sanatorium, Cannon Falls, Minnesota. He graduated from the University of Rochester School of Medicine and for several years has been associated with Dr. Ezra Bridge, specializing in tuberculosis. Dr. Allen assumed his duties on June 1, 1956.

* * *

Examinations for qualified fellows of the International College of Surgeons will be held in Chicago, July 23-24 and October 29-30, 1956.

Oral conferences will be held on August 6 and October 22.

For details, write to the Secretary of the Qualifications Council, International College of Surgeons, 1516 Lake Shore Drive, Chicago 10, Illinois.

* * *

The American College of Gastroenterology announces that its annual course in Postgraduate Gastroenterology

(Continued on Page 860)

Only Meat . . . is Meat

Suppose we suddenly found ourselves in a "Brave New World," in which all the rich protein, the B vitamins (including the important B_{12}), the minerals, and all the other nutrients of a juicy steak or a succulent pork chop could be compressed into a capsule. Suppose we were to take one or two such capsules each day. What would happen?

Would we be just as healthy? Would we be as happy?

There is something about man's wish for meat that cannot be satisfied by chemical or mathematical analyses. The feeling of satisfaction, the downright enjoyment of biting into and chewing, the pleasurable effect of having eaten well . . . all these make meat more than just an impressive list of essential nutrients. Long before man knew anything about the science of nutrition he knew meat was part and parcel of his health and his joy of eating and of living.

Other foods may be fortified and enriched, *but none can ever take the place of meat.*

Only meat is meat.

The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

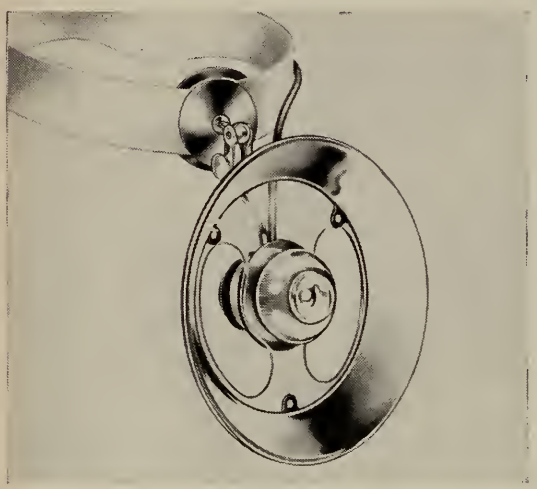
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Main Office, Chicago . . . Members Throughout the United States

Say you saw it in the Journal of the Michigan State Medical Society



No. 460

WELCH ALLYN HEADLIGHTS



No. 450

May we suggest that you check *both* Welch Allyn types before you purchase your next headlight?

No. 460 is a superior, direct, focusing light, favored for its combination of great intensity with freedom from filament shadows and other imperfections in the light beam. Focuses down to a 1/2" spot at 8" focal length or up to 6 1/2" at 13" focal length. Complete with transformer, $28.00.

No. 450 is the unique Full Beam headlight, which provides an intense light covering a large area evenly without glare or specular reflection. Binocular vision through the beam preserves normal depth perception and eliminated visible shadows. Complete with transformer, $36.00.

NOBLE-BLACKMER, INC.

267 W. Michigan 28148

Jackson, Michigan

(Continued from Page 858)

will be given at The Roosevelt in New York City, October 18, 19, 20, 1956.

The course again will be under the direction and co-chairmanship of Dr. Owen H. Wangensteen, Professor of Surgery of the University of Minnesota Medical School, who will serve as surgical co-ordinator, and Dr. I. Snapper, Director of Medical Education, Beth-El Hospital, Brooklyn, N. Y., who will serve as medical co-ordinator. Drs. Wangensteen and Snapper will be assisted by a distinguished faculty selected from the medical schools.

The subject matter to be covered in the Course, from a medical as well as surgical viewpoint, will cover, essentially, the advances in diagnosis and treatment of gastrointestinal diseases and a comprehensive discussion of diseases of the mouth, esophagus, stomach, pancreas, spleen, liver and gallbladder, colon and rectum, with special studies of radiology and gastroscopy.

For further information and enrollment, write to the American College of Gastroenterology, Department P.G., 33 West 60th Street, New York 23, N. Y.

* * *

Colored Television.—The Regents of the University of Michigan have accepted a gift to set up color television for use in surgical and clinical work at the University hospitals. The Herbert H. and Grace A. Dow Foundation of Midland made a grant of $178,750 to be used for color television equipment—a reguar portable television camera, a film television camera, control equipment, and a special television camera which will be mounted over the operating table.

The new equipment will be used specifically for teaching and will be available to telecast, nationwide if necessary, through local commercial stations in either color or black and white.

Besides teaching medical school students, Regent Charles Kennedy, Detroit surgeon, said the university also hoped to pass on to the hospitals and doctors of Michigan films and television versions of operations and clinics within the hospital.

Earlier, the regents approved a plan for a medical center in connection with the hospital with facilities for closed circuit television to replace the older amphitheater methods of surgical observation and teaching.

Doctors, it was explained, feel that more students and doctors can experience better training through television than through old methods of direct observation.

* * *

Selective Service headquarters has received a Defense Department requisition to draft 380 physicians for Navy duty. July will be the induction month and October-December the military activation period. SS data gathered from state directors indicate that the order can be filled without tapping any doctors in Priority III past age thirty. Of course, such registrants as may be available for military duty from Priorities I and II ranks are vulnerable for induction up to statutory age ceiling of forty-five.

(Continued on Page 862)



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COLDS,
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Nasal Spray

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dependable decongestant

Thenfadil® HCl, 0.1%
powerful antihistaminic

Zephiran® Cl, 1:5000
wetting agent and antibacterial

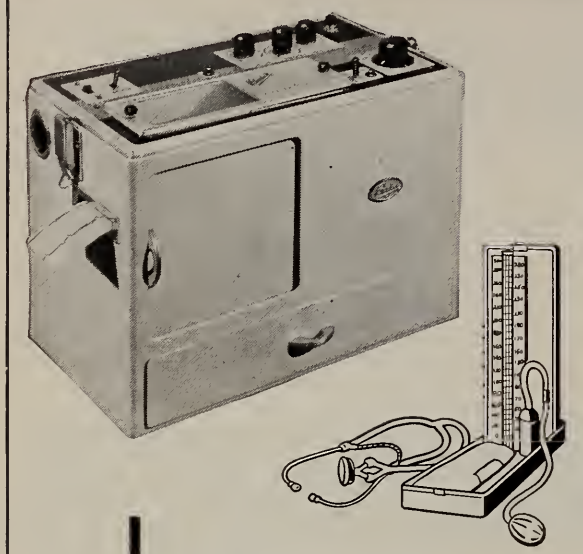
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(Continued from Page 860)

Neither Army nor Air Force is expected to call on SS for physicians, at least not before last quarter of 1956. Commissioning of a large crop of interns in July will help meet replacement requirements. Armed forces are hopeful that new career incentive law will reduce discharge rate and encourage voluntary procurement.—W.R.M.S., May 21, 1956.

* * *

The Association of American Physicians and Surgeons has announced the 1957 Eleventh Annual Essay contest for high school students. This year there will be a choice of topics: "The Advantages of Private Medical Care" or "The Advantages of the American Free Enterprise System." There will be six national prizes of $1,000; $500; $250; and three of $25 each. County and state medical societies and auxiliaries are invited to sponsor like contests on a local level.

* * *

The American Nurses Association, at the annual meeting in Chicago, May 14-18, 1956, through its House of Delegates, ratified opposition to commission survey scheme espoused by Rep. Frances Bolton (R., Ohio). ANA's position is that the profession can do better with more training subsidies and less investigating on part of government. The ANA also voted for amendment of the Taft-Hartley Act so as to enable nurses to engage in collective bargaining with hospitals on working conditions and salaries.

* * *

Civilian Medical Care for Army Personnel.—Where regularly established medical care is not available, the services of civilian physicians and hospitals is necessary. First aid or emergency care is authorized at any time. Emergency medical care is that which is necessary to save life or limb, or to prevent great suffering. Surgical operations should not be performed without prior authorization of the surgeon of the nearest military installation unless indicated as an emergency procedure. Elective medical treatment by civilian doctors will not be authorized. Obligations resulting from attention to dependents of military personnel are the responsibilities of the dependents or their sponsors. There must be prior authorization before civilion medical care is given. Contact the nearest military authority. The process is complicated. New regulations have been issued by the Office of the Surgeon General.

* * *

The National Tuberculosis Association, The American Trudeau Society, and the **National Conference of Tuberculosis Workers** held their annual meeting in New York City, May 20-25, 1956. The combined programs made a five-by-eight inch folder of 108 pages and cover. Michigan was well represented: H. M. Randall, Ph.D. of Ann Arbor, was part author of "Comparison of the Native Lipoids of Atypical Acid-fast Bacilli with the Lipoids of Known Mycobacterial Types." J. Richard Johnson, M.D., Nancy E. Furstenberg, M.D., Roy Patterson, M.D., Henry K. Schock, M.D., and Winthrop N. Davey, M.D., all of Ann Arbor, read a paper,

(Continued on Page 864)

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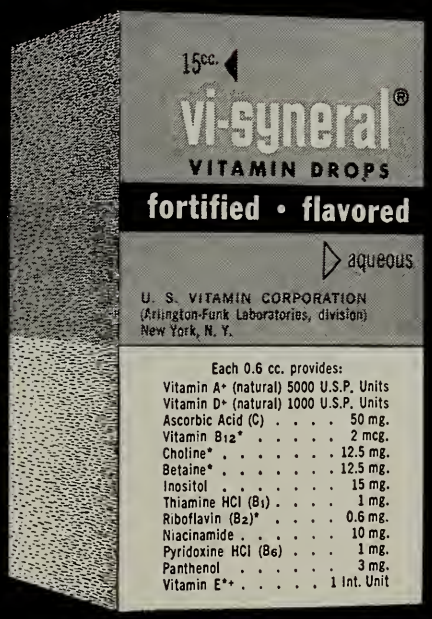
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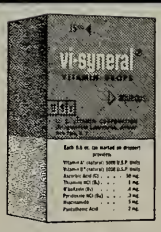
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(Continued from Page 862)

"Corticotropin and Adrenal Steroids as Adjuncts to the Treatment of Tuberculous Meningitis." Wilbur J. Steininger, M.D., of Northville, gave a paper on "Characteristics of Patients in Tuberculosis Hospitals—A U. S. Public Health Service Co-operative Investigation." He also presented an exhibit. Paul T. Chapman, M.D., Ruth S. Tibbits, M.D., Carl C. Birkelo, M.D., and George J. Baer, M.D., Herman Kiefer Hospital, Detroit, had an exhibit on "Bone and Joint Tuberculosis." E. Osborne Coates, M.D., and Geoffery L. Brinkman, M.D., of Henry Ford Hospital, Detroit, had a booth demonstrating "Aids in the Clinical Evaluation of Pulmonary Function."

* * *

New Vaccine.—The Army Medical Department has announced the successful trial of a new respiratory disease vaccine which has reduced the incidence of hospitalized cases of respiratory disease by more than eighty per cent. The new vaccine reaches its maximum effectiveness within a week after administration. It was developed in the Walter Reed Army Institute of Research in Washington, D. C.

* * *

Citation.—President Eisenhower has presented a citation for meritorious service to Admiral Ross T. McIntire, formerly Surgeon General for the Navy for work as chairman of the President's Committee on Employment of the Physically Handicapped, 1947 to 1954.

* * *

The third National Cancer Congress sponsored by the American Cancer Society, Inc., the National Cancer Institute, and the U. S. Public Health Service, has just been held at the Sheraton-Cadillac Hotel in Detroit, June 4, 5, 6, 1956. The Michigan State Medical Society made a contribution to aid in staging this congress.

The program was divided into many sections and had a number of Michigan participants. A Symposium on Cancer of the Prostate included "Criteria of Operability in Prostatic Cancer," with six participants including Reed Nesbit, M.D., of Ann Arbor, who was also part of a nine-member panel on "Therapy for Disseminated Prostatic Cancer." "Cancer of the Gastrointestinal Tract" was considered in five sections. "Lymphomas of the Gastrointestinal Tract" was presented by Frederick A. Coller, M.D., Ann Arbor, and William Eiller, M.D., Henry Ford Hospital, Detroit.

Cancer of the Lung was discussed under the titles: "Are Viruses Etiological Agents in Cancer?" "Incidence of Lung Cancer," "Etiology of Lung Cancer." Environmental Aspects" was presented by Arthur J. Vorwald, M.D., Detroit. A part of the discussion panel was Robert C. Horn, Jr., M.D., Detroit. Carl V. Weller, M.D., Ann Arbor, took part in the panel discussion on "Management of Lung Cancer," taking the pathological aspects. "Cancer of the Female Genital Tract" had Harry M. Nelson, M.D., of Detroit on the planning committee, also as chairman of the "Mass Screening Methods for Detection of Cancer of the

(Continued on Page 866)



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References: 1. Hollander, J. L., *Ann. New York Acad. Sc.* **61**:511, May 27, 1955.
2. Hollander, J. L., *et al. J.A.M.A.* **158**:476, June 11, 1955.

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(Continued from Page 864)

Cervix." He also reported on "Results of Screening Asymptomatic Patients for Uterine Cancer." Norman F. Miller, M.D., Ann Arbor, presented "An Analysis of the Results of Treatment in State I of Carcinoma of the Cervix." In "Cancer of the Head, Evaluation of Treatment Failures," Isadore Lampe, M.D., Ann Arbor, considered "The Tongue."

The seventieth Annual Clinic Day and Alumni Reunion of the Wayne University College of Medicine Alumni occurred May 8 and 9, 1956. The attendance was unusually high and the program outstanding. The opening assembly was led by Dean Gordon Scott with introductory remarks. Gordon B. Myers, M.D., Professor and Chairman of the Division of Medicine, presented "Treatment of Cardiac Failure." Charles G. Johnston, M.D., Professor and Chairman of the Division of Surgery, discussed "The Problem of Intestinal Obstruction." The afternoon program included: "The Clinical Use of Present-Day Insulins" by R. B. Leach, M.D., Assistant Professor of Medicine; "Ganglionic Blocks in the Treatment of Hypertension" by Yoshikazu Morita, M.D., Instructor in Medicine; "Treatment of Anemia," by George O. Clifford; "Value of Hormone Therapy in the Rheumatic Diseases" by Alfred Jay Bellett, M.D., Assistant Professor of Medicine; Management of Colles' Fractures" by Paul K. Truba, M.D., Assistant Professor of Surgery; "The Spinal Oblique Fracture of the Tibia" by A. Jackson Day, M.D., Clinical Assistant Professor in Orthopedic Surgery; "Pathological Fractures" by Herbert E. Pedersen, M.D., Senior Instructor in Orthopedic Surgery; "Diverticulosis of the Colon" by Don W. McLean, M.D., Clinical Assistant Professor of Surgery; "Carcinoma of the Colon" by Gaylord S. Bates, M.D., Clinical Assistant Professor of Surgery; "Neoplasms of the Chest" by Robert T. Crowley, M.D., Assistant Professor, New York University; "Injuries of the Chest" by Paul V. O'Rourke, M.D., Clinical Assistant Professor of Surgery; "Fluid Balance Management in Burns" by Warren O. Nickel, M.D., Assistant Professor of Surgery; "Local Treatment of Burns" by George L. Walker, M.D., Clinical Assistant Professor of Surgery; "Prevention of Pre-eclampsia," by Harold L. Fachnie, M.D., Assistant Professor of Obstetrics and

(Continued on Page 868)



Wilfrid H. Haughey, M.D., receiving the 1956 Wayne University Alumni Award from University President, Clarence B. Hilberry.



Duncan J. McColl, M.D., receiving the 1956 Wayne University Alumni Award from University President, Clarence B. Hilberry.

Wayne University Alumni Association held its 88th reunion and banquet Saturday, May 26, 1956, at the Sheraton-Cadillac Hotel in Detroit. Over 700 attended. Following a stated program, speeches were made by officers and the president of the University, Clarence B. Hilberry. The University for the seventh time awarded Distinguished Service Awards. Each year not more than one Doctor of Medicine has been so honored, but this year two were chosen. The list was Albert Earl Blashfield, Michigan Bar President and Editor of *Michigan State Bar Journal* and *Wisconsin Bar Journal;* Walter Leonard Couse, Past President, Association of General Contractors of America; Wilfrid Haughey, M.D.; Duncan John McColl, M.D.; and Clarence Raymond Wiley, Jr., Professor and Chairman of the Department of Mathematics, University of Utah.

Dr. Haughey, a member of the Wayne University class of 1906, is Editor of THE JOURNAL of MSMS, President of Michigan Medical Service (Blue Shield) and a trustee of the Wayne University Medical Library. Special recognition was given to Dr. Haughey for his research in leukemia and spasmodic asthma.

Dr. McColl, who was graduated from Wayne University in 1893, was honored for his lifelong service in the practice of medicine and for the honor bestowed upon him by MSMS as "Michigan's Foremost Family Physician" in 1954.

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1. Pollock, B. E., and Pruitt, F. W.: Am. J. M. Sc., 226:172, 1953.

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(Continued from Page 866)

Gynecology; "Detection and Treatment of Cervical and Uterine Carcinoma" by Charles S. Stevenson, M.D., Professor and Chairman of the Division of Obstetrics and Gynecology; "Obstetrical Analgesia and Anesthesia" by Ralph F. Sertor, M.D., Fellow in the Department of Gynecology; "Management of Leukorrhea and Vulvar Pruritus" by Charles D. Darling, M.D., Clinical Instructor. There was also a symposium on "Acute Conditions of the Abdomen," Moderator Osborne A. Brines, M.D., Professor of Pathology, Alfred M. Large, M.D., Clinical Assistant Professor of Surgery; Muir Clapper, M.D., Professor of Medicine; Charles S. Stevensen, M.D., and Robert M. Whitlock, M.D., Assistant Professor of Surgery.

Wednesday, May 9, the Alumni Reunion program was held at Hotel Fort Shelby. At the annual alumni business meeting, Don W. McLean, M.D., was installed as President and Osborne S. Brines, M.D., was made President-Elect. The scientific program was unusually well selected and presented:

Morning Session

"The Treatment of Coronary Heart Disease"
A. Carlton Ernstene, M.D., Cleveland, Ohio
Chief of Staff, Division of Medicine, Cleveland Clinic

"The Choice of Treatment of Hypothyroidism"
E. Perry McCullagh, M.D., Cleveland, Ohio
Head of the Department of Endocrinology and Metabolism, Cleveland Clinic

"Modern Methods in Psychiatric Therapy"
Jacques S. Gottlieb, M.D., Detroit, Michigan
Director of the Lafayette Clinic, Detroit
Professor of Psychiatry, Wayne University College of Medicine

End of Morning Session

Noon Program

Subscription Luncheon—Coral Room

"Technique of Preparing Medical Articles for Publication"
George E. Stilwell, M.D., Mayo Clinic
Section of Publications, Mayo Clinic
Member of the Board of Editors of the *American Journal of Clinical Pathology* and *Minnesota Medicine*

"Diagnosis and Treatment of Carcinoma of the Larynx, Bronchi and Esophagus"
Chevalier L. Jackson, M.D., Philadelphia, Pennsylvania
Professor of Laryngology and Broncho-Esophagology, Temple University

"Problems in Pediatric Surgery"
Orvar Swenson, M.D., Boston, Massachusetts
Surgeon in Chief of Boston Floating Hospital for Infants and Children, New England Medical Center
Associate Professor of Surgery, Clinical Professor of Pediatric Surgery, Harvard Medical School

The evening session was the annual alumni banquet with more than 200 in attendance. An Honorary Membership in the Association was presented *in absentia* to Honorable Albert E. Cobe. The class of 1956 was introduced, with response by Calier Worrel, '56. The Medical Alumni Sophomore Scholarship Award went to Jerald R. Creteau, '58; and the Medical Alumni Senior Scholarship award was won by Harold D. Partney, '56.

(Continued on Page 870)

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(Continued from Page 868)

Distinguished Service Citations were presented to John S. DeTar, M.D., '31, and Roger V. Walker, M.D., '19.

The Golden Anniversary Reunion of the Class of 1906 was, as always, the feature of the entire program. The class originally graduated eighty-three members.



Ten members of the Class of 1906, who received Golden Diplomas.
Top Row (left to right).—John F. McKay, Grand Forks, N. D.; Walter A. DeFoe, Richmond, Indiana; Wilfrid Haughey, Battle Creek; Raymond L. Clark, Detroit; Floyd L. Covert, Gaines; Claude H. Smith, Dearborn.
Bottom Row (left to right).—Ford M. Sommerville, Oil City, Pa.; Fred E. Stevens, Detroit; Alexander W. Blain, Detroit; James L. Hammond, Escondido, California.

Ten of the class attended the reunion and were given Gold Diplomas: Walter A. DeFoe, Richmond, Ind.; Alexander W. Blain, Detroit; Floyd L. Covert, Gaines; Raymond L. Clark, Detroit; Wilfrid Haughey, Battle Creek; James L. Hammond, Escondido, Calif.; John F. McKay, Grand Forks, N. D.; Claude A. Smith, Dearborn; Fred E. Stevens, Detroit; Ford M. Summerville, Oil City, Pennsylvania.

Irwin W. Sanders, who presented the diplomas, gave a short résumé of each doctor's accomplishments. It was surprising that so few have fully retired. Response was made by Alexander W. Blain, president of the class at graduation. Seven of the class were unable to attend, some on account of illness or disability: Andrew D. Potter, Maidstone, Ontario; Henry A. Ott, Detroit; Charles K. Boyajian, Sherman Oaks, Calif.; Lomen L. Harrison, Niles, Michigan; Wilbur J. Voorheis, Orlando, Florida; Thomas C. Starrs, Detroit, and Oscar H. Arndt, Detroit.

Six members of the class could not be located, although the University has made extensive enquiry.

* * *

Camp Midicha, a camp for diabetic children, sponsored by the Michigan Diabetes Association, provides fun and health for boys and girls from six to fourteen. The camp is located at Columbiaville about 65 miles north of Detroit, and will be open from August 12 to August 25, 1956, for diabetic children in a controlled regime. A competent staff directs the camp, and a physician and nurse are always in attendance. Facilities necessarily limit registrations to fifty children.

Further information may be obtained by contacting: Director, Camp Midicha, 1120 Maccabees Bldg., Detroit, or TE 1-3750.

The Pan-Pacific Surgical Association will hold its Seventh Congress in Honolulu, November 14-22, 1957. All members of the Medical profession are cordially invited to attend and are urged to make early arrangements. An outstanding scientific program by leading surgeons with sessions in all divisions of surgery and related fields will be offered. For information, write Dr. F. J. Pinkerton, Director General of the Pan-Pacific Surgical Association, Room 230, Young Building, Honolulu, Hawaii.

* * *

The Michigan Diabetes Association will sponsor a summer camp for diabetic children from August 12 to August 25 at the Tau Beta Camp in Columbiaville, Michigan. Diabetic children on a controlled regime and in the age group, six to fourteen, will be accepted. For information, write Director, Camp Midicha, 1120 Maccabees Bldg., Detroit.

* * *

The Post-Graduate Medical School of New York University-Bellevue Medical Center will hold a full-time, eight-week comprehensive course in occupational medicine September 10 through November 2. For information, write Dean, New York University Post-Graduate Medical School, New York 16, N. Y.

* * *

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(Continued on Page 872)



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(Continued from Page 870)

with the University of Havana School of Medicine, will hold the first inter-American Conference on Occupational Medicine and Toxicology, September 3-7 in Miami. For program, write Dr. Homer F. Marsh, Dean of the School of Medicine, University of Miami.

* * *

The American College of Obstetricians and Gynecologists is the new name of the American Academy of Obstetrics and Gynecology. Headquarters are at 116 South Michigan Avenue, Chicago 3, Illinois. Among the officers are the following men from Michigan: Norman F. Miller, M.D., Ann Arbor, First Vice President; C. Paul Hodgkinson, M.D., Birmingham, Secretary; and Harold C. Mack, M.D., Detroit, Chairman of District V.

* * *

The Census Bureau estimated the United States population on April 1 at 167,440,000, an increase of 16,308,000 since April 1, 1950.

* * *

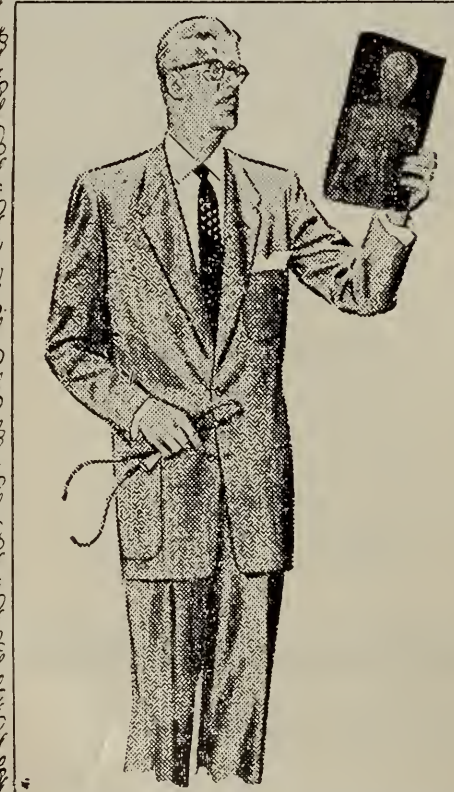
Parke, Davis and Company, Detroit, has announced publication of a new periodical, *Pediatric Patterns,* which will enable physicians to determine the incidence of communicable diseases in any given area. The periodical will include last-minute reports on poliomyelitis, diphtheria, streptococcal infections, measles and whooping cough.

More than 250 physicians attended the recent meeting of the Michigan Chapter of the American Academy of General Practice held in Detroit. Shown in the photo-



graph are: *(left to right)* Russell F. Fenton, M.D., Detroit, President of the Michigan Chapter of the American Academy of General Practice; Fred C. Brace, M. D., Grand Rapids, President of the Western Michigan Chapter; William L. Rodgers, M.D., Grand Rapids; Stanley Moleski, M.D., President of the Kent County Medical Society; and F. P. Rhoades, M.D., Detroit.

(Continued on Page 874)



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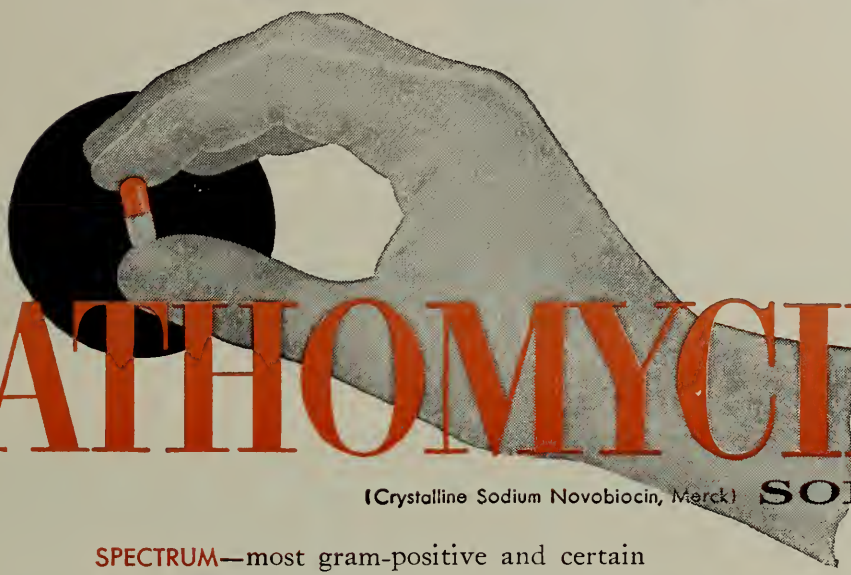
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(Continued from Page 872)

The 10th General Assembly of The World Medical Association will be held in Havana, Cuba, October 9-15. For information, write Dr. Louis H. Bauer, 10 Columbus Circle, New York 19, New York.

* * *



Otto O. Beck, M.D., Birmingham, will serve as Chairman of Arrangements for the 1957 Michigan Clinical Institute, Sheraton-Cadillac Hotel, Detroit, March 13-14-15, 1957.



Wm. M. LeFevre, M.D., Muskegon, is serving as Chairman of the Program Committee for the 1957 Michigan Clinical Institute.

* * *

Lawrence Reynolds, M.D., Detroit, has been awarded the honorary degree of Doctor of Laws by Wayne University, Detroit.

Congratulations, Doctor Reynolds!

The Mississippi State Medical Association Centennial opened on May 7 with the dedication of a new $150,000 central office headquarters building, containing 4,400 square feet of office space. The white ribbon stretched across the entrance was jointly cut by Elmer Hess, M.D., of Erie, Pennsylvania, President of the American Medical Association, and by S. Lamar Bailey, M.D., of Kosciusko, Mississippi, President of the Mississippi Association. The new Mississippi Medical Association headquarters building is in the heart of a growing medical center. The Mississippi Association membership now exceeds 1,300.

* * *

Basic Science.—The State of Michigan now has waiver with seventeen states of the twenty-one having basic science laws (in 1953, Michigan had the privilege of waiver with only one state). The improvement is due to changes in the Basic Science Act made at the Michigan Legislative Session of 1955. This has made it easier for applicants coming from other states to be certified in Michigan.

* * *

AMA Closes Printing Plant.—The last issue of *The Journal AMA* to roll off the AMA's own printing plant presses was that of June 30. Hereafter, *The Journal* will be printed by the McCall Corporation of Dayton, Ohio, which has been printing *Today's Health.* The AMA has owned its own printing establishment for seventy years, but the AMA headquarters building is no longer big enough to house both the printing plant and

(Continued on Page 876)

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BRIGHTON HOSPITAL is NOT interested in the patient who merely wishes to be dried out in order to resume drinking. We ARE interested in those patients who really, fervently, seek complete rehabilitation and a way of life FREED from alcohol.

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(Continued from Page 874)

the Association's many other activities. Other departments will immediately take over the first three floors and basement of the building (71,357 square feet).

* * *

Kinescopes of the first two "Grand Rounds" closed-circuit television programs produced earlier this year by the Upjohn Company of Kalamazoo have been released for showing before any group in the medical or allied professions, and require only a 16 mm. sound projector.

"Acute Abdominal Problems," an hour-long film of the January 18 program, deals with a variety of conditions and features a panel of eminent clinicians, including Charles G. Child, M.D., Orvar Swenson, M.D., and Harold F. Rheinlander, M.D., of Tufts University; Walter L. Palmer, M.D., University of Chicago; Leo G. Rigler, M.D., and Owen H. Wangensteen, M.D., University of Minnesota.

The second film, "The Cardiac Patient in Stress: Work, Surgery, Pregnancy," is one and one-half hours in length. Participating clinicians include: Paul Dudley White, M.D., Merrill C. Sosman, M.D., Samuel A. Levin, M.D., and C. Sidney Burwell, M.D., of Harvard University; and Samuel Proger, M.D., and Benjamin Etsten, M.D., of Tufts University.

Arrangements for local showing of these two kinescopes may be made through the Upjohn Company headquarters in Kalamazoo or local Upjohn representatives.



Our peripatetic President Wm. S. Jones, M.D., has had more than one unusual experience during his travels about the State. Between visits to the Allegan County Medical Society in Allegan and the Gratiot-Isabella Clare County Medical Society, Mount Pleasant he took time to sweep through Ludington with Mr. Hugh W. Brenneman to talk to the Lions Club, Optimist Club, visit the hospital, tape a radio broadcast, talk to the medical society and visit the newspaper and radio station offices. The picture shows him presenting the Optimist Creed to the Optimist Boy-of-the-Month in Ludington. Doctor obviously enjoyed this duty.

* * *

MSMS President William S. Jones, M.D., of Menominee, still holds justifiable pride in his native state of Georgia, in spite of some thirty-five years of practice in Michigan's Upper Peninsula. This loyalty was rewarded when Dr. Jones was made an honorary member of the Georgia State Medical Society while attending its annual meeting in Atlanta, May 10 and 11. Dr. Jones was born near Jeffersonville, Georgia. He attended the 1956 Georgia State Medical Society meeting as official representative of MSMS.

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Say you saw it in the Journal of the Michigan State Medical Society

O. T. Mallery, Jr., M.D., Ann Arbor, Chairman of The Award Committee of the Industrial Medical Association, recently presented an award "for health achievement in industry" to the Pennsylvania Railroad at the Association's annual banquet in Philadelphia.

* * *

Wayne University College of Nursing is in the midst of a recruiting program for students for its thirty-two-week training course for psychiatric aides, the second class of which will begin in September. The College is emphasizing the need for male psychiatric aides but is accepting applications from both men and women, eighteen to fifty years old.

This new program—first of its type in the United States—was inaugurated last January. Training includes both classroom instruction and carefully supervised practice in caring for mental patients at Northville State Hospitals. A certificate of achievement is presented to trainees upon completion of their course. Then the College of Nursing and Michigan Department of Mental Health review the record of each trainee for final job placement.

* * *

The American Board of Obstetrics and Gynecology on May 20, 1956 certified the following Michigan physicians following this year's examinations: Norman L. Banghart, M.D., Ann Arbor; Samuel J. Behrman, M.D., Ann Arbor; Charles J. Berger, M.D., Birmingham; Edmond S. Bosch, M.D., Ann Arbor; Fred B. Gray, M.D., Grand Rapids; Arthur R. Hummell, M.D., Detroit; Perry E. Prather, M.D., Saginaw; James M. Riekse, M.D., Grand Rapids; John T. Rogers, M.D., Detroit; James H. Tisdel, M.D., Port Huron; Robert F. Trescott, M.D., Lansing; Clarence F. Webb, M.D., Grand Rapids and Joseph B. Woolfenden, M.D., Detroit.

* * *

The nineteenth edition of the AMA Directory (for 1956) was delivered early in June. It was a tremendous undertaking, occupying the entire efforts of a large staff in the headquarters building. It lists 240,638 Doctors of Medicine in its 3,122 pages. Six years have elapsed since the last AMA Directory was published. There were over 250,000 address changes during the interval, 24,225 doctors have died, and 46,348 new names have been added.

In Michigan, there are listed 7,900 Doctors of Medicine, of these, 5,571 are members of the American Medical Association through the Michigan State Medical Society; eighty-five are members in Michigan but not of the AMA. There are 2,082 general practitioners listed; 790 indicate special interest in some specialty; 2,296 limit their practice to a specialty, and 1,653 have certificates of their specialty boards. A total of 1,491 are interns or house physicians, and 612 are in other full-time hospital service. There are 177 in government service, 222 are not in practice, and 270 are listed as retired.

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DOCTOR LOCATIONS
Through June 1, 1956

Placed by Michigan Health Council: *Name*	*Opened Practice in*	*Approximate Date*	*From*
Grant Garlock, M.D.	Jackson (Prison)	April 1956	Minnesota
Assisted by Michigan Health Council:			
Thomas Lindman, M.D.	Flint	April	Chicago
Stanley Michael, M.D.	Schoolcraft	July 1	Flint internship
Richard Rusak, M.D.	Standish	July 1	Saginaw
Donald Archibald, M.D.	White Pines	June 1	Detroit
Charles Schoff, M.D.	Midland	June 1	Williamston

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*Modell, W.: The Relief of Symptoms, Philadelphia, W. B. Saunders Company, 1955, pp. 265-266.

03156

SOCIAL SECURITY DISABILITY FREEZE

(Continued from Page 780)

there is consultation among physicians in any borderline situation.

Guides to Filling Out the Medical Report Form

No matter how good the standards, or how considered the judgment of the reviewing team, the determination reached can be no sounder than the evidence upon which it is based. To make sure that he is providing sufficient medical evidence for a prompt and fair determination, the doctor will want to consider the following guides in filling out medical report forms for those of his patients who have applied for the social security disability freeze:

1. Include sufficient clinical detail to enable the reviewing team to make a sound determination as to the severity and extent of the patient's current condition;

2. Give enough of the clinical history to provide information as to when the disability began, and when it became so severe as to keep the patient from working;

3. Describe the probable course of the condition from now on, so that a decision can be reached as to whether the impairment is likely to continue indefinitely, or end in death, or whether it is self-limiting, or remediable in the foreseeable future.

In 1940, when Blue Cross paid $27,000 for the hospital care given 455 new mothers and their babies, maternity cases comprised less than three per cent of all members hospitalized. In 1955, the 103,230 maternity cases represented one of every five Blue Cross admissions.

Communications

Dear Dr. Haughey:

I have your letter of May 18, 1956, concerning the Air Force firepower demonstration which was held at Eglin Air Force Base, Florida, last month. I had the good fortune to be invited to witness this spectacle as a guest of Maj. Gen. Robert E. L. Eaton, Commander of the 10th Air Force.

This experience is most difficult to describe in words, but we did find the trip a gratifying and unforgettable experience. We departed from Selfridge Air Force Base and returned two days later. The entire expedition was conducted with the efficiency and precision which has made our Air Force famous. We were fortunate in stopping over to visit the electronics training center at Keesler Air Force Base, Mississippi. The training program for the some ten thousand students presently in the school is by far the most elaborate and most efficient training program which I have ever observed.

The mission of the Air Proving Ground Command is to conduct operational suitability tests of tactically equipped aircraft, materiel, or equipment with its component systems and support items to determine its tactical suitability. These tests include tactical evaluation and will develop under simulated and actual combat and climatic conditions, improved operational tactics and techniques. These tests further develop and refine support and training requirements. Without undue interference with the primary purpose of these tests, additional data on functional development is collected. As a result of these tests, this command makes recommendations to Headquarters USAF on the type classification of aircraft (manned or pilotless) and equipment systems (or major components of either) which, though on the ground, are operating in conjunction with airborne aircraft; and, in the case of ground equipment systems or major components thereof essential to the aircraft mission, determines and takes final type classification action based on evaluation of logistical suitability, functional suitability, and operational suitability.

It is also the responsibility of the Air Proving Ground Command to conduct aerial firepower demonstrations at Eglin Air Force Base and to plan, co-ordinate, and supervise all other major aerial demonstrations in the United States.

The Air Proving Ground Command encompasses an area of 800 square miles, or approximately one-half million acres. In addition to the main base at Eglin there are ten auxiliary fields. Included in the reservation are 40 rocketry and gunnery ranges and a water range that extends 70 miles along the coast and 170 miles into the Gulf of Mexico.

The Climatic Hangar, large enough to accommodate the B-36 Intercontinental bomber, issued to conduct climatic testing of all types of equipment utilized by the Air Force. The Climatic Hangar operates within a temperature range of plus 170° to minus 65° Fahrenheit, and has been an invaluable adjunct to actual cold weather tests conducted in Alaska and Greenland.

The Air Proving Ground Command is not confined to this geographical area, however. The world is its proof test area, and permanent detachments of the command are located in other areas within this country and in the Far East and Europe.

Perhaps the greatest resource within the Air Proving Ground Command are the men in the machines and the men behind the machines.

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STARTING DATES—SUMMER & FALL, 1956

SURGERY—Surgical Technic, two weeks, August 6, September 17
Surgical Anatomy and Clinical Surgery, two weeks, October 1
Surgery of Colon and Rectum, one week, September 17
General Surgery, one week, October 22
Thoracic Surgery, one week, October 1
Esophageal Surgery, one week, September 24
Breast and Thyroid Surgery, one week, October 22
Gallbladder Surgery, three days, October 29
Fractures and Traumatic Surgery, two weeks, October 15
GYNECOLOGY & OBSTETRICS — Obstetrics and Gynecology, three weeks, October 22
Office and Operative Gynecology, two weeks, September 17
Vaginal Approach to Pelvic Surgery, one week, September 10
MEDICINE—Electrocardiography and Heart Disease, two week basic course, October 8; one week advanced course, September 17
Internal Medicine, two weeks, September 24
Gastroscopy and Gastroenterology, two weeks, September 10
Gastroenterology, two weeks, October 22
Dermatology, two weeks, October 15
Cardiology (Pediatrics), two weeks, November 5
RADIOLOGY—Diagnostic X-Ray, two weeks, September 17
Clinical Uses of Radioisotopes, two weeks, October 8
UROLOGY—Two-week course, October 8
Cystoscopy, ten days, by appointment

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physical resources. Together, they form an ideal team for assessing the operational suitability of the latest Air Force weapons and equipment.

Two kinds of testing are done at APGC: (1) operational suitability testing to determine whether new equipment is capable of performing the mission for which it was designated under all foreseeable conditions of use, and (2) testing of new tactics and operational procedures so that the personnel who eventually use the new equipment can do so with knowing, capable hands.

When the APGC takes over an aircraft, for example, it has been proven as a flying machine only. Earlier testing is done by the Air Research and Development Command to make certain that the aircraft fully meets design specifications, but its capabilities in the field are still unknown and must be proven by test personnel in this northwest Florida Proving Ground.

Eglin Air Force Base, headquarters and only permanent command installation, is an ideal laboratory for testing aircraft and other weapons of air warfare. It is isolated, spacious (approximately 465,000 acres), offering such varied terrain as sea-coast, hill-country, and heavily forested plain. The nucleus of this vast territory was donated by an air-minded citizen of Florida, the late James E. Plow, and the remainder was once the Choctawhatchoo National Forest. Dotted with ten auxiliary airfields and numerous bombing and gunnery ranges, the area affords test officers opportunity to set up simulated combat problems under differing conditions, at the same time leaving a wide margin of safety for the protection of civilians living in surrounding localities. Relations with nearby communities are good as these Floridians realize that the mock battles performed in the sky over the former hunting grounds of the Seminole Indians are necessary for the preservation of their way of life.

Those battles—under conditions as close to those of actual combat as imagination and skill can make them—are held with USAF pilots alternately in the roles of attacker and defender, and occasionally with a pilotless drone as a predestined victim. Experienced combat pilots gather data as they fly not only to evaluate the aircraft being tested but to provide future pilots with reliable information concerning its characteristics and methods of employment in training and combat.

When an aircraft has been thoroughly tested in its temperate phase, tests at extremes of temperature begin. For this the plane is taken to Eglin's Climatic Hangar, a triumph of engineering skill that is an integral part of the natural and man-made test laboratory facilities at the disposal of the Air Proving Ground Command. The main chamber of the hangar is 200 by 250 feet, large enough to accommodaate a B-36 Intercontinental bomber and several smaller planes at the same time. The temperature in this chamber can be lowered to sixty-five degrees below zero in less than forty-eight hours, then raised to 165 above. It contains bomb pits, landing gear actuator stands, ports for running jet engines and firing guns. Short of actual flight, there is little about a plane's performance that cannot be tested in the hangar.

Perhaps the main value of the hangar is that of safety for Air Force pilots and crews. Weather performance data gathered while an aircraft is stationary in the hangar is important knowledge when the plane is tested in flight under naturally severe climatic conditions. It gives test officers an opportunity to know about engine performance, stability of controls and reliability of fuel systems in an aircraft before they trust their lives to it.

Although the Climatic Hangar tests are as complete as science can make them, they cannot be finally conclusive since they do not include flight. A detachment must still be sent to Ladd Air Force Base near the Arctic Circle in Alaska. Missions flown at Ladd are similar to those flown at Eglin during the temperate

phase—they are planned to test the aircraft's ability to do the job for which it was designed. But there is one great difference: the winter temperature at Ladd often sinks as low as sixty below and remains for days at a time. There is little about a plane's performance at low temperatures that cannot be determined in day-to-day operations under such rigorous conditions.

The Air Proving Ground Command at Eglin Air Force Base is under the command of Maj. Gen. Robert W. Burns, USAF. The tests and demonstrations were conducted flawlessly and with amazing precision. Some of the more spectacular demonstrations included in the missions were as follows:

Aircraft Type	*Munitions*	*Description of Mission*
4 F-84F's	None	Thunderbird precision flying demonstration
4 F-100's	None	Supersonic boom from level flight
F-89D	104 2.75″ rockets with flash heads	Air-to-air rocket demonstration
CF-100	56 2.75″ rockets with flash heads	Air-to-air rocket demonstration
4 F-86H's	2 fire bombs per acft	Formation fire bomb attack on factory target
F-89C	50 rockets from T-110 gun	Strafing simulated enemy aircraft
F-84F	2 napalm bombs; 2 250-lb. bombs; 28 2.75″ rockets; cal. .50 guns with API and tracer	Display of fighter versatility. All-out effort by one fighter-bomber
3 F-100's	1000-lb GP bomb, each aircraft.	Demonstration of 60°, 90°, and 110° toss bombing technique
B-57	One 1000-lb. bomb	Demonstration of toss bombing technique, 45°
B-57	Eight rocket pods (56 2.75″ rockets); five 500-lb. incendiary bombs with chutes	Night tactical bomber attack on marshalling yards
B-66B	Seven 750-lb. bombs	Demonstration of newest tactical bomber
KB-50 and 3 F-100's	None	Demonstration of probe and drogue type of in-flight refueling
B-52	Napalm air burst	Simulated A-bomb burst
B-36	Maximum load of 500-lb. bombs	Demonstration of bombing capability

Many of these demonstrations were new and thrilling to me. It was certainly a great thrill to see the air disturbance around the plane when the sound barrier was broken and to feel the force of the supersonic boom which followed.

Many of us have witnessed the development of flight, electronics, and nuclearphysics in our generation. One cannot help but be alarmed by the destructive potential of our modern weapons. We can take some comfort in the realization that our preparedness and de-

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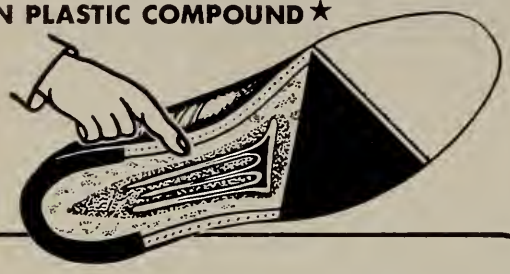
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*Moyer, J. H., and others:
J. Chronic Dis. 2:670, 1955.

03056

fensive strength have reached such a high degree of development. I personally hope that the existence of these forces make their wartime use unthinkable and improbable.

Sincerely yours,
LAWRENCE A. PRATT, M.D.

Detroit, Michigan
June 4 1956

* * *

Mr. William J. Burns,
Executive Director
Michigan State Medical Society
Dear Bill:

As you know, we conducted our first conference for attorneys representing state and county medical societies in Chicago on April 19-20. From all reports, the meeting was a real success and since this was our first attempt of this kind we are very happy.

I wanted to write to you and tell you that the success of the meeting was due primarily to the caliber of the men that appeared on the program. The contribution that was made by Joe Herbert was one of the highlights of the two-day meeting. I have already written to him and thanked him; however, I also wanted you and the officers of your association to know what a good job he did. I hope that you will express our appreciation to the proper people for permitting him to participate.

Best personal regards,
C. JOSEPH STETLER, *Director*
Law Department
American Medical Association

Legal Opinions

Dear Mr. Burns:

You have referred to me for opinion the inquiry of a certain County Medical Society Secretary, concerning post-mortem examinations by county coroners.

Specifically, the Secretary asks, "What is the legal authority and responsibility of our coroners in ordering autopsies and is the prosecuting attorney or the board of supervisors at all involved?"

The powers and duties of county coroners are purely statutory. They differ in counties having a population less than 250,000 from those that are larger. In any event, however, we must find the answers in the statute law, there being no common law governing the coroner.

The duty or authority to hold post-mortem examinations by direction of the county coroner is to be found in a section of the Code of Criminal Procedure entitled "Proceedings for the Discovery of Crime." These provisions differ but little from those which have been on our statute books for several decades. There are other statutory references to the duties of the coroner which are somewhat of lesser importance. Among them is the provision in the statute concerning vital statistics (M.S.A. 14.228) which reads as follows:

> "In case of any death occurring without medical attendance it shall be the duty of the undertaker or person acting as such to notify one of the county coroners, or a justice of the peace acting as coroner, who shall investigate or hold an inquest as to the cause of such death on the death certificate and shall sign the same officially as coroner or acting coroner. If such death was the result of violence, the said coroner, or justice of the peace acting as such, shall state the cause of the violence and whether or not it was apparently accidental, suicidal or homicidal and shall furnish such further information as may be required by the state commissioner of health."

It is to be noted, however, that under this section the coroner is to make either an investigation or an

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inquest "as the circumstances require." If an inquest, it must be as set forth in the Criminal Code, Chapter XIII, being M.S.A. 28.1169 to 28.1191.

The specific reference is to be found in Sec. 4 of the Chapter, being M.S.A. 28.1172. The significant portion thereof states as follows:

> "* * * Provided. That in all cases it shall be lawful for the magistrate holding any such inquest, to require by subpoena the attendance of a competent physician or surgeon for the purpose of making a post-mortem examination and of testifying as to the result of the same; and he may also employ a chemist in cases affording reasonable ground of suspicion that death has been produced by poison and the amount of compensation for the attendance and services of such physician, surgeon or chemist shall be audited and allowed by the board of supervisors of the proper county, or board of county auditors in counties having such board."

No authority is granted by statute for a coroner to direct a post-mortem examination other than that contained in the section of the Criminal Code referred to above.

The question as to whether a coroner, even though he be a doctor of medicine, is authorized or permitted to perform a post-mortem examination, except in the course of a formal inquest, is discussed in an opinion of the Attorney General given in 1915 to A. M. Wilkinson, M.D., then coroner of Charlevoix County. The opinion in part reads as follows:

> "I note from your communication of recent date that you hold the office of coroner in Charlevoix County and that some question has arisen as to your authority to perform post-mortem examinations in certain cases. The precise point at issue is whether or not such an examination may be made by you in your official capacity as coroner without an inquest being held, compensation therefor being made by the county.
>
> "The statute does not seem to contemplate any such procedure as you suggest. Section 11831 of the Compiled Laws of 1897 empowers a coroner who conducts an inquest to summon a competent surgeon or chemist when the attendance of such is deemed necessary. This statute must, I believe, be taken to imply that a post-mortem examination is not to be made by, pursuant to the direction of, a coroner except where a formal inquest is held. It will be noted also that the statute does not empower the coroner himself to make such an examination. * * * It seems to me, therefore, that in a case falling within the jurisdiction of a county coroner if the circumstances surrounding the death are of a suspicious character and such as in the judgment of the coroner demand an examination including a post-mortem, an inquest should be held and the provisions of the statute with reference to procuring a surgeon or chemist should be observed."

Report of Attorney General 1916, p. 216.

It is, of course, well known that the inquest to which reference is made is authorized only upon such persons as shall have come to their death suddenly or by violence. This, however, is not the type of case to which the Society seems to have reference.

It is my opinion that except pursuant to a statutory inquest in cases where suspicion of crime is involved, that is death by violence or poison, there is no statutory authority, much less any duty, for the coroner to order a post-mortem examination.

As to the question of what part the prosecuting attorney may have in this connection, reference is had to M.S.A. Sec. 28.1189 which reads as follows:

> "Where, in the discretion of the prosecuting attorney, an inquest is deemed necessary, the coroner upon written order of the prosecuting attorney, shall summon six (6) men all of whom shall be citizens of the United States, residents of the county, and shall administer the oath as provided for by this chapter except that the jurors need not view the body of the deceased."

In construing this provision the Attorney General in an opinion dated May 22, 1946, number 0-4658, held in substance as follows: Although the prosecuting attorney has no specific statutory authority to order an autopsy if he determines a need for it on discovery of crime, the reasonable expense incurred thereby, such as the charge for services of a pathologist performing it, is a just claim against the county, since the prosecuting attorney may incur such expenses as are immediately necessary for the investigation and discovery of crime, subject to audit and allowance by the board of auditors.

It is to be observed that this power of the prosecuting attorney relates itself to formal inquests for the purpose of discovery of crime and not merely for the determination of the cause of death in other types of cases.

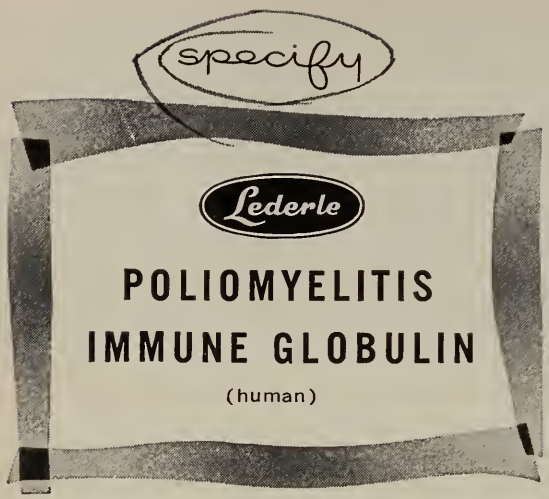
The supervisors appear to have no statutory authority to direct the coroner to cause post-mortem examinations to be made in cases other than those provided for by statute. The fee of the physician who makes the autopsy and testifies at the statutory inquest is to be audited and allowed by the board of supervisors, as indicated by the section above cited, (M.S.A. 28.1172). There is no statute which authorizes a board of supervisors to pay for post-mortem examinations under other circumstances.

In conclusion, it is my opinion that the coroner may not be compelled to conduct or to direct autopsies merely for the purpose of ascertaining the cause of death, except in cases where formal inquests are authorized. Formal inquests may not be had except when crime or violence is suspected.

Very truly yours,
J. JOSEPH HERBERT
Legal Counsel

May 15, 1956

Say you saw it in the Journal of the Michigan State Medical Society



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DIRECTIONS OF PSYCHIATRY

(Continued from Page 810)

At present, the latest experiments in medical education include an emphasis on family practice and on the effects which the individual's way of life and his interpersonal relationships have on his health. Leaders in medical education are pretty well agreed that the practice of medicine must embrace the attitudes of the old family physician, fortified with the findings of modern science.

Psychiatry, because of its interest in the patient as a person, is in an excellent position to bind together the various departments of modern medicine so that there can be a complete approach to the problems of the individual. It should be taught as a basic science in our medical schools and co-ordinated with other branches of medicine so that students may be familiarized with the emotional problems that will loom so large in their daily practice.

In the exhilaration we may well feel at the advances of psychiatry and at the fact that it may serve as the cornerstone of comprehensive medicine, let us never forget our own interdependencies, our own deficits, and our own specific mission as ministers unto minds diseased. Let us say, as did Roger Bacon seven hundred years ago:

"All sciences are connected; they lend each other material aid as parts of one great whole. . . . As an eye torn out or a foot cut off, so it is with the different departments of knowledge; none can attain its proper result separately, since all are part of one and the same complete wisdom."

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

BOOKS RECEIVED

NEW AND NONOFFICIAL REMEDIES. Containing descriptions of drugs evaluated by the Council on Pharmacy and Chemistry of the American Medical Association. 1956. An annual publication issued under the direction and supervision of the Council. Philadelphia and Montreal: J. B. Lippincott Company, 1956.

COMMUNITY PROGRAMS FOR MENTAL HEALTH. Theory—Practice—Evaluation. Editors: Ruth Kotinsky, Helen L. Witmer. Advisory Committee: Abraham Z. Barhash, M.D.; Jules V. Coleman, M.D.; Sibylle Escalona; Katherine E. Faville; George E. Gardner, M.D.; Paul V. Lemkau, M.D.; W. Carson Ryan; Mildred C. Scoville. Contributors: Barbara Biber; H. E. Chamberlain; Sol W. Ginsburg; Robert R. Holt; Louisa P. Howe; Marie Jahoda; Elizabeth de Schweinitz; Edith Miller Tufts. Cambridge, Massachusetts: Harvard University Press, 1955.

A DICTIONARY OF DIETETICS. By Rhoda Ellis, Ph.D. Instructor of Foods and Nutrition Department of Home Economics, Brooklyn College, New York. New York: Philosophical Library, 1956. Price, $6.00.

THE TRUTH ABOUT CANCER. By Charles S. Cameron, M.D., Medical and Scientific Director of American Cancer Society; with a preface by Elmer Hess, M.D., Erie, Pennsylvania, President of the American Medical Association. 300 pages. Englewood Cliffs, N. J.: Prentice-Hall, 1956. Price, $4.95. (All proceeds—royalties—go to American Cancer Society.)

This interesting volume is for the layman. The basic material is written so that it is readily understood by laymen. Some of the fascinating theories and facts about civilization and cancer are revealed. The volume is a highly readable book of twenty-four chapters, with fifty illustrations. The eminent author systematically explains causes, misconceptions, diagnosis, treatment, research and the classes of cancer.

"The Truth About Cancer" has an excellent chapter on quackery—which alone is worth investment in this worthy addition to cancer literature. The volume is a scientifically complete and accurate statement of the cancer problem in all its phases—sanely optimistic. The latest authoritative medical facts are presented simply and in an enlightening manner. The "Truth About Cancer" offers hope for saving *twice* as many lives as are now being saved. It has just to be read!

W.J.B.

SYMPOSIUM ON EXPERIMENTAL TUBERCULOSIS BACILLUS AND HOST WITH AN ADDENDUM ON LEPROSY. Editors for the Ciba Foundation, G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch., and Margaret P. Cameron, M.A., A.B.L.S., assisted by Cecilia M. O'Connor, B.Sc. 69 illus. Boston: Little, Brown and Company, 1955. Price, $9.00.

This book presents the proceedings of the symposium held on experimental tuberculosis, sponsored by the Ciba Foundation, an educational and scientific charity established under the laws of England and operated independently by a Board of Trustees. These proceedings are published in full with a minimum of editing, and presents the informal discussions of the current and incomplete research in tuberculosis by a group of leading scientists, with Professor Arnold Rich of Johns Hopkins University, serving as chairman. The conference did not deal with the clinical aspects of tuberculosis, but concentrates its attention on the constitution and properties of the tubercle bacillus, which endow it with the capacity to act as it does in the body.

Several chapters are devoted to the chemical structure of the tubercle bacillus and the effect of these bacterial components in stimulating reaction in the various tissues. Other chapters contain many stimulating informal discussions and arguments on such current topics as the mode of action of cortisone on the pathogenesis of tuberculosis, the mechanism involved in acquired immunity, the relationship between the growth requirements and the pathogenicity of isoniazid resistant mutants of tubercle bacilli and the role of bacterial multiplication in the establishment of immunity to tuberculosis. This book is highly recommended for the tuberculosis specialist and is a "must" for the scientist doing basic research in the field.

Included in the book is an addendum on experimental leprosy, which is included because of the pathogenic relationship between tuberculosis and leprosy.

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A COURSE IN PRACTICAL THERAPEUTICS. By Martin Emil Rehfuss, M.D., F.A.C.P., LL.D. (Hon), Professor of Clinical Medicine, Emeritus, and Director of the Division of Therapeutics in the Department of Medicine, the Jefferson Medical College, Philadelphia; Attending Physician, the Jefferson Medical College Hospital, Philadelphia. Alison Howe Price, A.B., M.D., Associate Professor of Medicine, The Jefferson Medical College, Philadelphia; Assistant Physician to the Jefferson Medical College Hospital, Philadelphia; Chief Clinical Assistant Diabetic Clinic, Curtis Clinic, Philadelphia. Third Edition. Baltimore: The Williams & Wilkins Company, 1956. Price $15.00.

With the continuous development of new methods in treatment, more potent remedies, more specialized treatment and the introduction of an astounding number of drug preparations, the busy physician (and student) is in need of a complete and concise reference work which avails him of the simplest form of modern treatment of diseases. The third edition of this book, written in outline form, is worthy of its whole-hearted acceptance as a medium through which this need can be achieved.

The scope and content of this volume embraces a unique attempt to correlate clinical medicine with applied therapeutics. Inference is made that good therapy depends on accurate diagnosis, and throughout the volume differential diagnoses are presented as much as possible.

The volume is divided into four broad sections entitled "General Therapeutic Principles," "Symptomatic Therapy," "Treatment of Specific Disorders," and "Special Treatment." The Table of Contents is complete and detailed, permitting reference to any section or subsection without difficulty.

This is a concise, inclusive, easy to read, and magnificently illustrated book, with diagrams and schematic charts which serve to make it eminently practical.

STATE DEPARTMENT OF SOCIAL WELFARE

(Continued from Page 831)

If he fails to use the total amount, his allotment will be reduced.

This method of medical care provision has been found to be quite satisfactory and has reduced the total amount spent in most counties where tried. About half of the counties are now under the new program and the balance of the state will be included beginning July 1, with gradual changeover until October 1, when the whole state including Wayne County will be operating under the new regulations.

Much more care is expected to be rendered to the patients, and a savings *in toto* accomplished. If, in certifying to Form SB-54A, the doctors are realistic, it is hoped all monies will actually be spent for medical care.

The provision of dental care for aid to dependent children cases is now receiving careful consideration. Amounts of care and costs are unknown quantities, but rules of relief and requirements are being established. Permission is being sought from federal departments to experiment in certain restricted areas to determine needs and costs.

Over a two-year period, Michigan State Medical Society committees have interested themselves in these problems. We are happy to report great progress has been made in simplification of forms and procedures.

ANNUAL REPORT OF CHILD WELFARE COMMITTEE—1955-1956

(Continued from Page 851)

driver training examinations. They also stressed the need for general education that infants with obvious eye defects get early attention.

The Subcommittee on School Health Problems studied the possibility of standardized health examinations and forms for these examinations, school health councils, and closer affiliation with the Michigan School Health Association.

The Committee wishes to express its appreciation for the co-operation of the Michigan Department of Health and will continue to serve to the best of its abilities in advising Michigan State Medical Society on current child welfare problems.

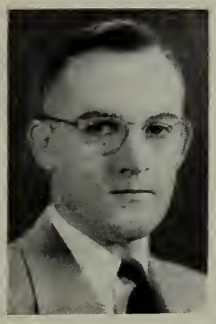
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Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 14, Minnesota.

Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, $6.00; single copies, 60 cents. Additional postage; Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year.

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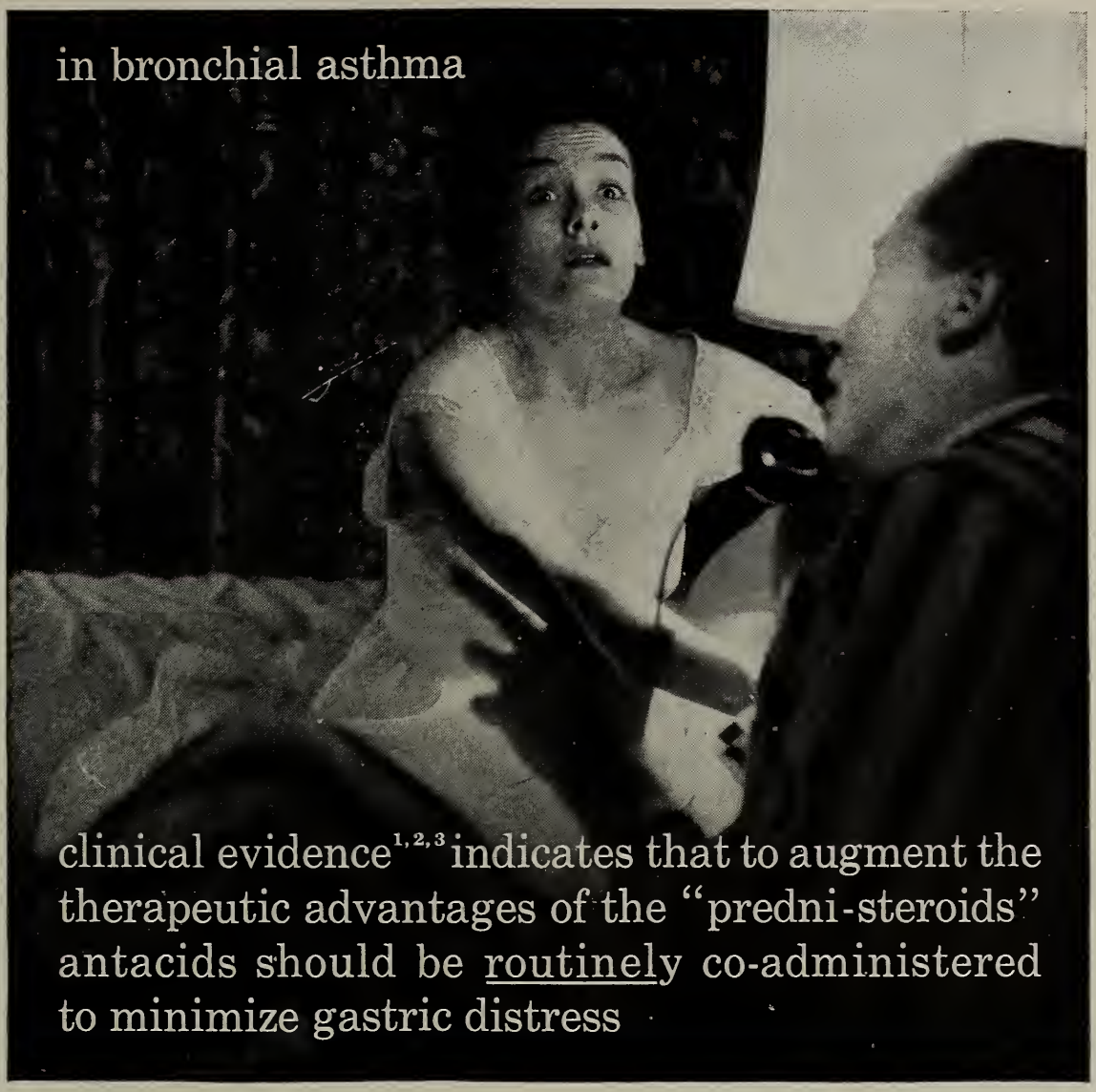
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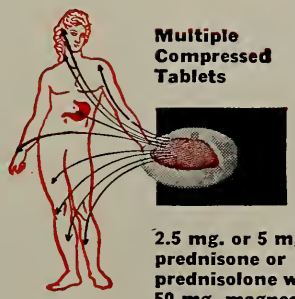
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References: 1. Boland, E. W., *J.A.M.A.* 160:613, (February 25,) 1956. 2. Margolis, H. M. *et al, J.A.M.A.* 158:454, (June 11,) 1955. 3. Bollet, A. J. *et al, J.A.M.A.* 158:459, (June 11,) 1955.

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NEW OFFICERS' NIGHT BANQUET—SEPTEMBER 26

A sparkling innovation at the 1956 MSMS Annual Session will be the Officers' Night Banquet, to be held Wednesday evening, September 26, at 7 P.M. in the Grand Ballroom of the Sheraton-Cadillac Hotel, Detroit.

Sponsored by the State Society and its Woman's Auxiliary, the subscription banquet will be in lieu of the annual dinner of The Council and the Woman's Auxiliary Banquet. These two affairs will thus be unified and expanded so that all members of the Michigan State Medical Society and their ladies may take advantage of an excellent opportunity for a gay evening of good fellowship and pleasure.

The Officers' Night Banquet will be informal. Invitations to all members, giving detailed information on the interesting program, will be mailed in August. Tables may be reserved in groups of ten. Individual reservations also are invited.

EXPANSION OF RHEUMATIC FEVER PROPHYLACTIC PROGRAM

Effective June 1, 1956, payment of a fee to doctors of medicine for administration of benzathine penicillin G in their offices to children who have had rheumatic fever but who have not had a previous court order will be made by the Crippled Children Commission under certain conditions of hardship. It may have been that previous care was provided by hospital insurance or by other agencies, or it may be that economic circumstances have changed.

The Crippled Children Commission will accept for this purpose only a certificate from the physician on a special form furnished by the Commission bearing the following information:

1. Identification of child and physician.
2. First and second attacks of rheumatic fever —where treated, by whom, and when.
3. A definite statement as to presence or absence of heart disease with manifestations if the former.
4. Diagnosis—New York Heart Association Nomenclature preferred.
5. A definite statement that third-party payment will be necessary to insure uninterrupted prophylaxis unless gratuitous service is rendered.
6. A definite statement under the signature of the responsible relative that participation is desired and that financial inability exists.
7. A definite request for authorization to bill the Michigan Crippled Children Commission for prophylactic treatment.

HOMETOWN MEDICAL CARE PROGRAM CONTINUED

H. V. Higley, Veterans Administrator, officially informed the President of the Michigan State Medical Society, W. S. Jones, M.D., of Menominee, in a letter dated June 13, 1956—"We will continue our arrangement in Michigan for the Veterans Hometown Medical Plan."

In his communication, Administrator Higley explained several other factors, one which is the matter of economy. "At the present time," stated Mr. Higley, "we are trying to make certain that the figure at which we have arrived is somewhat in keeping with what it would cost to do the work ourselves, and you may recall there was quite a divergence between the charges being made by the several states still operating a plan similar to the Michigan one."

The action of Administrator Higley assures for Michigan veterans a continuation of the personal medical care of their own practitioners of medicine in their own communities. Free choice of doctor and hospital again has been retained!

VA PSYCHIATRIC AND NEUROLOGIC FEES CHANGED

The Veterans Administration, early in July, notified Michigan Medical Service of the following changes in the VA Hometown Medical Care Program so far as psychiatric and neurological care is concerned:

EXAMINATIONS BY SPECIALISTS

0039A	Major portion of each additional half-hour	$5.00
0040A	Major portion of each additional half-hour	5.00

OUT-PATIENT TREATMENT BY SPECIALISTS

0054A	Major portion of each additional half-hour	5.00

AMENDMENT IN DESCRIPTIONS AND FEES EXAMINATIONS BY SPECIALISTS

		New Fee	*Old Fee*
0039	Examination by Psychiatrists to determine diagnosis	15.00	10.00
0040	Examination by Neurologists to determine diagnosis	15.00	10.00

OUT-PATIENT TREATMENTS BY SPECIALISTS

0053	Psychiatric treatment up to first half-hour	7.50	5.00
0053A	Major portion of each additional half-hour	7.50	5.00
0054	Neurologic treatment	10.00	5.00

The new fees will be applicable only to those services authorized and rendered on and after the effective date, July 1, 1956.

(Continued on Page 898)

BETTER

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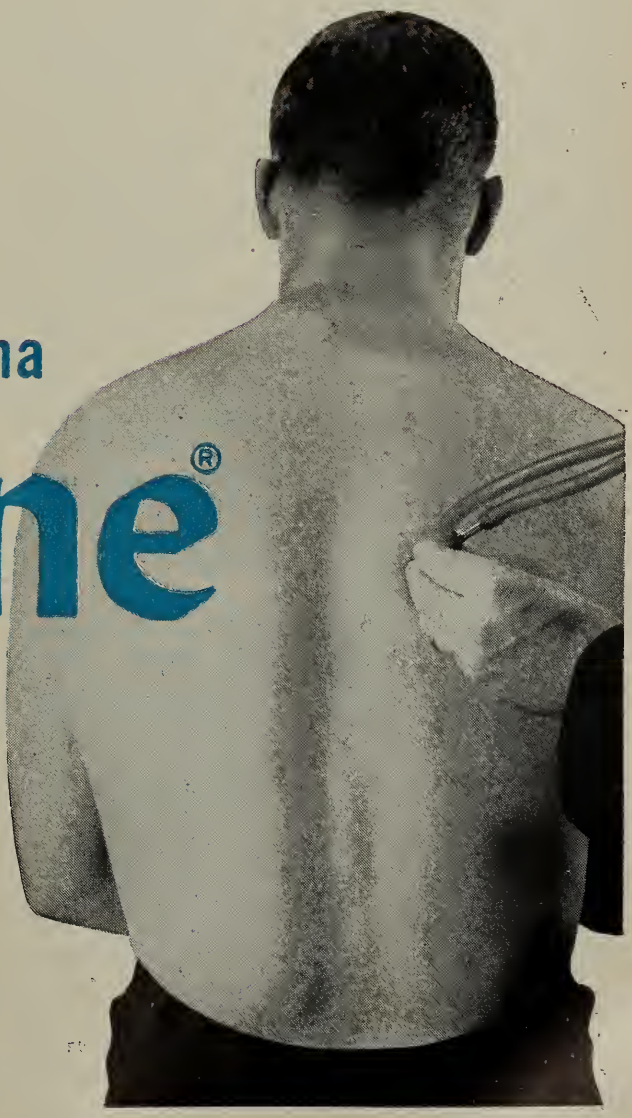
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1. Johnston, T. G., and Cazort, A. G.: J. Allergy 27:90, 1956. 2. Schwartz, E.: New York J. Med. 56:570, 1956. 3. Schiller, I. W., et al.: J. Allergy 27:96, 1956.

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(Continued from Page 896)

HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of June 20, 1956

- **Governor's Study Commission on Prepaid Hospital Care Plans**—Mr. George Bowles, Chairman, had reported the possibility that the forthcoming study may be broken into three segments, each to be given to a separate department of the University of Michigan, all to be corrected by some agency (such as the Brookings Institution)—under the supervision of a special committee of the U of M Regents.
- **M. H. Marks, M.D.,** Detroit, was appointed chairman and P. A. Martin, M.D., Detroit, and H. B. Zemmer, M.D., Lapeer, as members of a special MSMS liaison committee to the Michigan Society of Neurology and Psychiatry and the Michigan Psychological Society.
- **Committee Reports**—The following were given consideration: (a) Michigan Cancer Co-ordinating Committee, meeting of May 17; (b) Rural Medical Service Committee, May 17; (c) Committee on Michigan Medical Service, May 23; (d) Committee on Postgraduate Medical Education, May 24; (e) Program Committee for 1957 Michigan Clinical Institute, June 7; (f) Child Welfare Committee, June 7; (g) Committee on Study of Prevention of Highway Accidents, June 7; (h) Committee on Study of Healing Arts, June 11; (i) Rheumatic Fever Control Committee, June 13; (j) Health and Accident Insurance Policy Control Committee, June 19; (k) Hospital Relations Committee, June 19.
- **Committee personnel** for the year 1956-57 was presented by President-elect Arch Walls, M.D., for publication in the Handbook for Delegates.
- **G. B. Saltonstall, M.D.,** was appointed chairman of the March 14, 1957, Testimonial Luncheon honoring Michigan presidents of National Medical Associations (held coincident with the Michigan Clinical Institute).
- **B. L. Masters, M.D.,** Fremont, was appointed official representative to attend AMA Conference of Chairmen of State Medical Society Rural Health Committees, October 19, 20 at Purdue University.
- **IBM Billing Procedure**—Progress report on changeover in MSMS billing from Kardex to the electronic system, as of January 1, 1957, was made by the Executive Director, who was instructed to notify all county society secretaries of this change.
- **V. G. Chabut, M.D.,** of Northville, and John R. Rodger, M.D., of Bellaire, were thanked for their attendance and reports on, respectively, the 5th National Conference on Physicians and Schools, and the Regional Conference on Traffic Safety.
- **Report on AMA House of Delegates' Session** of June, 1956, was presented by William A. Hyland, M.D., Chairman of AMA Delegation.
- **"Officers' Night" Banquet,** September 26, 1956, in Detroit, during MSMS Annual Session. Recommendation of Woman's Auxiliary that a subscription banquet be held on the Wednesday evening of the 1956 Annual Session in Detroit was approved; the Woman's Auxiliary was invited to assume the responsibility for arranging this function.
- **Legal Counsel's progress report** on Kopprasch case: In June, the Circuit Court found that Dr. Kopprasch's amended bill of complaint was indefinite and hazy and the plaintiff was instructed to amend the complaint or his pleading will be stricken.
- **R. W. Waggoner, M.D.,** Ann Arbor, was appointed Chairman with Z. Steven Bohn, M.D., Detroit, and J. Joseph Herbert, M.D., Manistique, as members of a committee to study the problem of care of the mentally disturbed to avoid hospitalization.
- **Poliomyelitis Vaccine Distribution.**—Report on action taken by the State Advisory Committee on Poliomyelitis Vaccine Distribution was presented by K. H. Johnson, M.D., Lansing, a member of this governmental committee.

AMEF CHAIRMAN FOR MICHIGAN



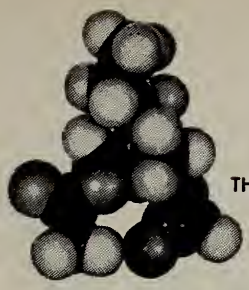
Donald J. Jaffar, M.D., of Detroit, is the new Michigan Chairman for the American Medical Education Foundation, the national fund through which doctors of medicine are able to support American medical schools.

Dr. Jaffar is Associate Professor of Urology and acting head of the department at Wayne State University College of Medicine, and attending Urologist and acting head of the department at the Detroit Receiving Hospital. He is also president of the staff at Providence Hospital and attending urologist there.

Dr. Jaffar is a diplomate of the Board of Urology, Fellow of the American College of Surgeons, and active in a number of regional and national medical and specialty organizations.

A resident of Detroit since 1913, he has practiced in that city since completing his internship and residency at the University Hospital, Ann Arbor, following his graduation from University of Michigan Medical School in 1928. Dr. Jaffar has been associated with Wayne State University and the Detroit Receiving Hospital since 1930.

(Continued on Page 902)



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Literature and Samples Available on Request

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METICORTEN (PREDNISONE) PLUS CHLOR-TRIMETON WITH ASCORBIC ACID

For prompt and effective relief, especially in many resistant allergic disorders, METRETON affords the benefits of two established agents with unexcelled anti-inflammatory, anti-allergic and antipruritic effectiveness. *supported by essential vitamin C* —for stress support and for postulated effect on prolonging steroid action *no better corticosteroid* —original brand of prednisone...minimal electrolyte effects—METICORTEN *no better antihistamine* —unexcelled in potency and freedom from side effects—CHLOR-TRIMETON effective against hay fever, pollen asthma, perennial rhinitis, acute and chronic urticaria, angioneurotic edema, drug reactions, inflammatory and allergic eye disorders, pruritic and contact dermatoses.

formula: Each tablet of METRETON provides 2.5 mg. of METICORTEN (prednisone), 2 mg. of CHLOR-TRIMETON maleate (chlorprophenpyridamine maleate), and 75 mg. ascorbic acid.

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quickly clears nasal passages • avoids rebound engorgement and sympathomimetic side effects • safe even for cardiacs, hypertensives, children, pregnant patients •

Composition: Contains 2 mg. (0.2%) METICORTELONE acetate (prednisolone acetate) and 3 mg. (0.3%) of CHLOR-TRIMETON gluconate (chlorprophenpyridamine gluconate) in each cc.

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MT-J-576



Schering

(Continued from Page 898)

INSURANCE INDEMNITY PAID

L. Fernald Foster, M.D.
Bay City, Michigan

Re: Provident Life and Accident Insurance Co.

Dear Doctor:

This is a note to the members of the Michigan State Medical Society Committee on Health and Accident Insurance Policy Control.

I should like to inform the members of this committee of the fact that a recent claim of mine with regard to disability was given special consideration and a full indemnity was paid even though the company was under no legal obligation to do so.

I would recommend continuation of our contract with the Provident Life and Accident Insurance Company.

Yours very truly,

———————————M.D., Detroit

June 18, 1956

MEDICAL EDUCATION

In 1955, eighty-one approved medical schools enrolled more than 28,000 students and graduated almost 7,000 physicians. Twenty-five years ago, there were seventy-six approved schools that enrolled less than 22,000 students and graduated less than 5,000 physicians. This year there are eighty-two approved schools of medicine, and by 1960 there will be at least eighty-five such institutions.

Since 1910, there has been a 120 per cent increase in the number of graduating physicians and a 128 per cent increase in medical school enrollment, as compared with an 80 per cent increase in the total population of the United States.—Editorial, JAMA, April 21, 1956.

organomercurial diuretics
"...permit ingestion of enough salt to make food palatable; without them, many patients would lose their appetites, a consequence of the salt-free diet which has occasionally been known to cause serious malnutrition."*

*Modell, W.: The Relief of Symptoms, Philadelphia, W. B. Saunders Company, 1955, pp. 265-266.

03156

DUES AND SPECIAL ASSESSMENTS OF STATE MEDICAL ASSOCIATIONS

State	*Dues*	*Special Assessments*	*Comments*
Alabama	$ 20	—o—	Dues $50.00 effective 1/1/57
Arizona	60	—o—	Dues $70.00 effective 1/1/57 —extra $10.00 for AMEF
Arkansas	25	—o—	
California	50	—o—	
Colorado	50	—o—	
Connecticut	28	$10**	
Delaware	50	—o—	
District of Columbia	50	—o—	
Florida	40	—o—	
Georgia	25	—o—	
Idaho	40	—o—	
Illinois	40	—o—	
Indiana	30	—o—	
Iowa	60	—o—	$25 increase authorized; not yet levied
Kansas	40	—o—	
Kentucky	35	—o—	
Louisiana	50	—o—	
Maine	60	—o—	
Maryland	50* 30†	—o—	
Massachusetts	35	—o—	
Michigan	45	$10 (1956)	
Minnesota	40	—o—	
Mississippi	35	—o—	Dues increased $5 each for three years; 1957, $40; 1958, $45; 1959, $50
Missouri	25	$10 (1957)	
Montana	53	—o—	
Nebraska	35	—o—	
Nevada	100	$20 (AMEF)	
New Hampshire	40	—o—	
New Jersey	30	—o—	
New Mexico	70	—o—	
New York	25	$10‡	
North Carolina	40	—o—	
North Dakota	75	—o—	
Ohio	20	—o—	Dues $25 effective 1/1/57
Oklahoma	42	—o—	
Oregon	40	—o—	
Pennsylvania	40	—o—	
Rhode Island	50	—o—	
South Carolina	20	—o—	
South Dakota	75	—o—	
Tennessee	25	—o—	
Texas	50	—o—	
Utah	50	—20—	
Vermont	35	—o—	
Virginia	25	—o—	
Washington	35	—o—	
West Virginia	25	—o—	
Wisconsin	65	—o—	
Wyoming	25	—o—	

**Voluntary assessment for building addition.
*Baltimore City members.
†County Society members.
‡Effective 1/1/57 for employees' pension fund.

anxiety is part of **EVERY ILLNESS**[1]

The physically sick patient faces two stresses—the sickness and the anxiety that it brings.[1] All too often, the anxiety is a threat to the patient's progress. It may intensify symptoms, give uncertainty to therapy, and impair rapport.

To combat the anxiety component of physical illness, EQUANIL promotes equanimity, relieves muscle tension, and encourages normal sleep.[2] By these specific actions, EQUANIL gives breadth to the treatment program—expands the physician's resources.

Supplied: Tablets, 400 mg., bottles of 50.
Usual Dose: 1 tablet, t.i.d.

1. Braceland, F.J.: Texas State J. Med. 51:287 (June) 1955.
2. Lemere, F.: Northwest Med. 54:1098 (Oct.) 1955.



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American Medical Association

109th Annual Meeting

Chicago, Illinois—June, 1956

Civil Defense

On June 9, 1956, more than 300 physicians and national, state and local civil defense leaders attended the fourth national Medical Civil Defense Conference held Saturday in the Morrison Hotel.

The conference, sponsored by the Council on National Defense of the American Medical Association in conjunction with the AMA's 105th Annual Meeting, focused special attention on the physician's role in medical disaster preparedness on local and national levels.

Findings of a nationwide Congressional inquiry into civil defense were reported to the opening session of the conference by Rep. Chet Holifield of the 19th California district, Chairman of the House Subcommittee on Military Operations.

Allocation, distribution and utilization of the Federal Civil Defense Administration's new 200-bed emergency hospital were subjects of a panel discussion which also included a report on results of a recent field test of the hospital at Fort Meade, Maryland.

Roles of the AMA and physicians in medical disaster preparedness were outlined by Dr. Harold C. Lueth of Evanston, Ill., Chairman of the Council's Committee on Civil Defense, and Dr. R. A. Benson of Bremerton, Wash., a member of the Council.

The discussion program was augmented by exhibits, civil defense films and mannikin demonstrations of medical techniques adaptable for disaster training of civil defense volunteers.

Conference of Presidents

The twelfth annual Conference of Presidents and Other Officers of State Medical Societies was held Sunday, June 10, 1956, in the Grand Ball Room of the Palmer House, in Chicago. This organization was founded by Andrew P. Brunck, M.D., then President of the Michigan State Medical Society. It has developed into a proud and influential group having average attendance of several hundreds, with outstanding speakers each year. The talks are printed and distributed afterwards to those who registered and attended.

Reports of officers and committees, and selection of a President-elect, John W. Green, M.D., of Vallejo, California, were followed by installation of the new President, Guthrie Y. Graves, M.D., of Bowling Green, Kentucky. President Charles L. Farrell, M.D., of Pawtuckett, R. I., then made appropriate remarks and introduced the speakers.

President Graves spoke of "The Medical Practitioner. Yesterday, Today, and Tomorrow." Henry Viscardi, President of Abilities, Inc., West Hampton, New York, legless and with but one arm, who never walked until he was twenty-eight, told of his company which he organized with four people, all handicapped. They have shown a profit each year and now have about 500 workers and an income of about a million and a half dollars. His talk was very inspiring. He told the Congressional Committee recently that there are no completely handicapped people.

Howard Pyle, former Governor of Arizona, now Administrative Aid to the President, spoke about "The Body Politic." Among other things, he urged medical leaders to exert most of their activities in supporting some program, and not forever be in opposition. One can become known to his great disadvantage as always "agin" a proposition, he said. The fourth speaker was Dr. Allen Stockdale, of the National Association of Manufacturers. His talk entitled "The Healer Goes Forth," gave a glimpse into the future of the practice of medicine, and what we may look for in the very near future as the result of present research soon to be used.

The meeting closed with a cocktail party.

House of Delegates

Hospital accreditation, evaluation of graduates of foreign medical schools, private practice by medical school faculty members, federal aid to medical education and premature publicity on new drugs were among the major subjects acted upon by the House of Delegates.

Dr. David B. Allman, surgeon of Atlantic City, N. J., was named unanimously as president-elect for the coming year. A member of the AMA Board of Trustees since 1951 and also chairman of the Committee on Legislation, Dr. Allman will become president of the American Medical Association at the June, 1957, meeting in New York City. He will succeed Dr. Dwight H. Murray of Napa, California, who took office at the Tuesday evening inaugural program in the Chicago Civic Opera House.

The House of Delegates selected Dr. Walter L. Bierring of Des Moines, Iowa, as recipient of the 1956 Distinguished Service Award of the American Medical Association for his long and outstanding contributions to medicine and humanity. Dr. Bierring, a past president of the AMA, was honored for his achievements in the fields of public

(Continued on Page 906)



MERCK SHARP & DOHME
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On August 1, 1956, Sharp & Dohme, the pharmaceutical and biological division of Merck & Co., Inc., adopts the name "Merck Sharp & Dohme" and a new trademark to reflect the teamwork which has already produced significant new medical products. • Developing modern medical products and making them widely available requires teamwork of the highest order in research, production, and distribution. The desire to achieve this unity of effort prompted the merger of Merck & Co., Inc., and Sharp & Dohme, Inc., three years ago. • Merck Sharp & Dohme—combining in name as well as in fact the traditions and experience of two time-honored leaders in the medicinal field—offers bright promise for further advances in helping physicians conquer disease.



MERCK SHARP & DOHME
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Division of Merck & Co., INC.
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(Continued from Page 904)

health and medical examining board work. He formally accepted the award at the Tuesday inaugural program.

Total registration at the end of the fourth day of the meeting, with half a day still to go, had reached 22,394, including 9,793 practicing physicians and 12,601 residents, interns, medical students and guests.

Hospital Accreditation.— The House of Delegates approved the report of the Committee to Review the Functions of the Joint Commission on Accreditation of Hospitals, which was appointed by the Speaker as a result of action taken at the June, 1955, meeting. The Committee came to the following conclusions:

1. Accreditation of hospitals should be continued.
2. The Joint Commission should maintain its present organizational representation.
3. The Board of Trustees should report annually to the House of Delegates on the activities of the Joint Commission.
4. Physicians should be on the administrative bodies of hospitals.
5. General practice sections in hospitals should be encouraged.
6. Staff meetings required by the Joint Commission are acceptable, but attendance requirements should be set up locally and not by the Commission.
7. The Joint Commission should not concern itself with the number of hospital staffs to which a physician may belong.
8. The Joint Commission is not and should not be punitive.
9. The Joint Commission should publicize the method of appeal to hospitals that fail to receive accreditation.
10. Reports on surveys should be sent to both administrator and chief of staff of hospital.
11. Surveyors should be directly employed and supervised by the Joint Commission.
12. Surveyors should work with both administrator and staff.
13. New surveyors should receive better indoctrination.
14. Blue Cross and other associations should be requested not to suspend full benefits to non-accredited hospitals until those so requesting have been inspected.
15. The American Medical Association should conduct an educational campaign for doctors relative to the functions and operations of the Joint Commission.
16. The Committee also suggests that the American Medical Association and the American Hospital Association encourage educational meetings for hospital boards of trustees and administrators either on state or national levels to acquaint these bodies with the functions of accreditation.
17. This Committee asks to be discharged upon submission of this report to the House of Delegates.

The House also approved a reference committee suggestion that the following statement be added to strengthen the report:

The Committee recommends that the commissioners to the Joint Commission on Accreditation of Hospitals, appointed by the Board of Trustees of the American Medical Association, urge that Commission to study:

1. The problems of the exclusion from hospitals and arbitrary limitation of the hospital privileges of the general practitioner, and
2. Methods whereby the following stated principles may be achieved:

"The privileges of each member of the medical staff shall be determined on the basis of professional qualifications and demonstrated ability."

"Personnel of each service or department shall be qualified by training and demonstrated competence, and shall be granted privileges commensurate with their individual abilities."

Graduates of Foreign Medical Schools.—The House of Delegates approved in principle a program for the evaluation of graduates of foreign medical schools seeking hospital positions in the United States. The proposed program was developed by the Cooperating Committee on Graduates of Foreign Medical Schools, representing the AMA Council on Medical Education and Hospitals, American Hospital Association, Association of American Medical Colleges and Federation of State Medical Boards of the United States.

The following principles were emphasized by the Council on Medical Education and Hospitals in its report recommending AMA participation in the program:

1. Although the responsibility to share educational opportunities in medicine is recognized, the primary concern must be for the health care of the American public. Thus, before assuming responsibility for the care of patients as interns or residents, all graduates of foreign medical schools (immigrants, exchange students and American graduates of foreign medical schools) should give evidence, as nearly as can be measured, of having reached a level of educational attainment comparable to that of students in American schools at the time of graduation.
2. The primary objective of this Committee is to devise an effective mechanism for measuring educational attainment in the absence of intimate and continuing knowledge of the educational background of foreign-trained physicians. This mechanism should provide hopsitals with pertinent information regarding the medical qualifications of foreign-trained physicians seeking positions as interns or residents. It should not interfere with the hospital's privilege of making its own selection among qualified physicians, nor should it serve as a substitute for or interfere with the normal licensure procedures of the various state boards.
3. It is not intended that this mechanism be applicable to those foreign medical school graduates in this country as temporary students participating in programs of medical and related studies in recognized universities, medical schools and postgraduate schools, who by the very nature of their study are not involved in the responsibility of patient care.

The proposed plan calls for establishment of a central administrative organization to evaluate the medical credentials of foreign trained physicians desiring to serve as interns or residents in American hospitals. Basic requirements would include satisfactory evidence of at least 18 years of total formal education, including a minimum of 32 months in medicine exclusive of any time which

(Continued on Page 908)

The Importance of Rescinnamine in

Rauwiloid®

The Original Alseroxylon Fraction of India-Grown Rauwolfia Serpentina, Benth.

The isolation of rescinnamine,[1] another potent alkaloid in Rauwolfia serpentina, has substantiated two important points:

A—It discredits the erroneous opinion that reserpine is *the* sole active principle of Rauwolfia;[2]

B—It helps to define the advantages of Rauwiloid, the alseroxylon fraction of Rauwolfia serpentina, which presents desirable alkaloids[3] of the Rauwolfia plant (among them reserpine and rescinnamine) but is freed from undesirable alkaloids and the dross of the crude root.

Pharmacologic and clinical evaluation has shown rescinnamine to be similar to reserpine in antihypertensive activity, but to be considerably less sedative and much less apt to lead to lethargy and mental depression.[4, 5]

The interaction of reserpine, rescinnamine, and other contained alkaloids may well account for the balanced and desirable clinical behavior of Rauwiloid.

The dosage of Rauwiloid is simple and definite: Merely two 2 mg. tablets at bedtime. For maintenance, one tablet usually suffices.

1. Klohs, M.W.; Draper, M.D., and Keller, F.: Alkaloids of Rauwolfia Serpentina Benth. III. Rescinnamine, a New Hypotensive and Sedative Principle, J. Am. Chem. Soc. 76:2843 (1954).
2. Cronheim, G.; Brown, W.; Cawthorne, J.; Toekes, M.I., and Ungari, J.: Pharmacological Studies with Rescinnamine, a New Alkaloid Isolated from Rauwolfia Serpentina, Proc. Soc. Exper. Biol. & Med. 86:120 (May) 1954.
3. Gourzis, J.T.; Sonnenschein, P.R., and Barden, R.: Alterations in Cardiovascular Responses of the Dog Following Rauwiloid, an Alkaloidal Extract of Rauwolfia Serpentina, Proc. Soc. Exper. Biol. & Med. 85:463 (Mar.) 1954.
4. Hershberger, R.; Hughes, W., and Dennis, E.: Clinical Results in the Treatment of Hypertension with Rescinnamine, Clin. Res. Proc. 3:71 (Feb.) 1955.
5. Smirk, F.H., and McQueen, E.G.: Comparison of Rescinnamine and Reserpine as Hypotensive Agents, Lancet 2:115 (July 16) 1955.

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LOS ANGELES

(Continued from Page 906)

in this country would be considered as premedical study or internship. Applicants with satisfactory credentials then would take a screening examination to determine their medical knowledge and their facility with the English language. Successful applicants then would be certified to hospitals and other interested organizations, with the approval of the foreign-trained physician concerned.

Private Practice by Medical School Faculty Members.—Another major action by the House involved the problem of private practice by medical school faculty members, which has been under study by the Committee on Medical and Related Facilities of the Council on Medical Service. The House adopted a Council report which stated "that it shall be the policy of the American Medical Association that funds received from the private practice of medicine by salaried members of the clinical faculty of the medical school or hospital should not accrue to the general budget of the institution and that the initial disposition of fees for medical service from paying patients should be under the direct control of the doctor or doctors rendering the service."

It was further recommended that adequate liaison be developed and maintained between each county medical society and any medical school or schools in its area; that the Council on Medical Education and Hospitals and the Association of American Medical Colleges urge all medical schools to assist and work with medical societies in developing such liaison, and that publicity emanating from a medical school should be in good taste and of a type which has the approval of the general medical community in that area.

The adopted report also said:

"It is not in the public or professional interest for a third party to derive a profit from payment received for medical services, nor is it in the public or professional interest for a third party to intervene in the physician-patient relationship."

Federal Aid to Medical Schools.—One of the most controversial subjects of debate on the floor of the House was a resolution expressing strong opposition to S. 1323, a bill in Congress providing for one-time, matching grants to medical schools for construction purposes. The Association in recent years has been supporting such legislation in principle, with certain reservations concerning details of some provisions. The House reaffirmed that policy by approving a reference committee statement which said:

"We appreciate the intent with which this resolution was introduced, but at the same time we feel that there are many economic and geographical factors involved, which might not make this resolution practical on a national level. Inasmuch as no evidence was offered to this Committee to justify a change in the previously declared policy of the House of Delegates, your Committee recommends that this resolution be not adopted."

Premature Drug Publicity.—The House adopted a substitute resolution which read:

WHEREAS, In recent years, events have indicated the necessity for a closer liaison between the pharamceutical manufacturer and the American Medical Association; and

WHEREAS, In view of the tremendous number of new drugs being developed and the expanding research programs in medical colleges, clinics and hospitals being financed by the drug industry, it is imperative that the manufacturer and the medical profession develop cooperatively guiding principles which will protect the American people from being subjected to the premature release of information pertaining to new products or techniques; and

WHEREAS, Competition within the pharmaceutical industry has become extremely keen so that in the advertising of their products drug manufacturing firms have been forced into the expenditure of larger and larger sums of money and in increasingly broader fields of advertising; therefore be it

RESOLVED, That the Board of Trustees of the American Medical Association appoint a liaison committee to meet with representatives of the pharmaceutical manufacturers to accomplish this objective.

Miscellaneous Actions.—Among many other actions on a wide variety of subjects, the House also:

Approved a Board of Trustees statement on Social Security which included the following:

"It is imperative that we distinguish clearly between this problem of coverage of physicians and the far more dangerous disability proposal. The fact should be recognized that the shape of medical practice in the future is not directly related to the inclusion or exclusion of physicians under OASI. It is a matter of vital importance to us as individuals, but it cannot, per se, stimulate further government intrusion into medical care. On the other hand, the disability amendment obviously brings the Social Security Administration closer to the regulation of medical care than ever before."

Adopted a resolution amending the Bylaws to provide that the Vice President, Treasurer, Speaker and Vice Speaker of the House of Delegates shall be ex officio members of the Board of Trustees with all the rights and duties of the Board without the right to vote.

Increased membership of the Council on Medical Service from six to nine active or service members and eliminated all ex officio members except the immediate Past President.

Directed the Council on Medical Service and the Council on Industrial Health to reconsider the "Guiding Principles for Evaluating Management and Union Health Centers" through their joint Committee on Medical Care for Industrial Workers and to so revise the guides that they conform completely with the Principles of Medical Ethics.

Authorized the Committee on Federal Medical Services to make a continuing study of all aspects

(Continued on Page 912)

TODAY's resistant pathogens are the tough survivors of a dozen widely-used antibiotics. Certain organisms, notably *Staphylococcus aureus*[4] and susceptible strains of *Proteus vulgaris*, produce infections which have been resistant to *all* clinically useful antibiotics.

To augment your armamentarium against these resistant infections, 'CATHOMYCIN' (Novobiocin, Merck), derived from an organism recently discovered and isolated in the Merck Sharp & Dohme Research Laboratories,[1] is now available.

SPECTRUM—'CATHOMYCIN' [1,2,3,5,6] has also been shown to be active against other organisms including—*D. pneumoniae*, *N. intracellularis*, *S. pyogenes*, *S. viridans* and *H. pertussis*, but clinical evidence must be further evaluated before 'CATHOMYCIN' can be recommended for these pathogens.

ACTION—'CATHOMYCIN' in optimum concentration is bactericidal. Cross-resistance with other antibiotics has not been observed.[7]

TOLERANCE—'CATHOMYCIN' is generally well tolerated by most patients. [5,6,8,9,10,11]

'CATHOMYCIN'

(Crystalline Sodium Novobiocin, Merck) **SODIUM**

ABSORPTION—'CATHOMYCIN' is readily absorbed, [5,6,9] and oral dosage produces significant blood and tissue levels which persist for at least 12 hours.[7]

INDICATIONS: Clinically 'CATHOMYCIN' has proved effective for cellulitis, carbuncles, skin abscesses, wounds, felons, paronychiae, varicose ulcer, pyogenic dermatoses, septicemia, bacteremia, pneumonia and enteritis due to *Staphylococcus* and infections caused by susceptible strains of *Proteus vulgaris*.[6,7,8,9,10,11,12,13,14] Also, it is of particular value as an adjunct in surgery since staphylococcic infections seem prone to complicate postoperative courses.

DOSAGE: Four capsules (one gram) initially and then two capsules (500 mg.) twice daily.

SUPPLIED: 'CATHOMYCIN' Sodium (Crystalline Sodium Novobiocin, Merck) in capsules of 250 mg., bottles of 16.

'CATHOMYCIN' *is a trademark of Merck & Co., Inc.*

REFERENCES:

1. Wallick, H., Harris, D.A., Reagan, M.A., Ruger, M., and Woodruff, H.B., *Antibiotics Annual*, 1955-1956, New York, Medical Encyclopedia, Inc., 1956, pg. 909.
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(Continued from Page 908)

of VA medical activities under the basic policy established in June, 1953, and suggested reconsideration of the temporary exceptions made at that time with respect to neuropsychiatric and tuberculous disorders.

Recommended that the Board of Trustees select New York City as the place of the 1961 annual meeting.

Opening Session.—At the Monday opening session Dr. Elmer Hess, outgoing AMA President warned that the medical profession must be prepared to face an all-out drive by some labor groups for national compulsory health insurance. Dr. Dwight H. Murray, then President-Elect, told the House that general practitioners and specialists must guard against "any cleavage within our profession," and he urged strength through unity.

Dr. Lowell T. Coggeshall, special assistant to Secretary Marion B. Folsom of the U. S. Department of Health, Education and Welfare, assured the House that the over-all medical objectives of HEW are in accord with those of the AMA. A memorial plaque honoring the late Dr. Carl M. Peterson, secretary for seventeen years of the AMA Council on Industrial Health, was presented by Admiral Ross T. McIntire on behalf of the President's Committee on Employment of the Physically Handicapped. The Illinois State Medical Society presented a check for $164,940 to the American Medical Education Foundation.

Inaugural Program.—Dr. Murray, in his inaugural address at the Tuesday evening ceremony in the Chicago Civic Opera House, declared that "what we need most in medicine today is to find some way of combining modern scientific methods with the personal, friendly touch of the old-time family doctor." The inaugural program, which included the Bluejacket Choir of the U. S. Naval Training Center at Great Lakes, Ill., was telecast over Station WBKB in Chicago.

Election of Officers.—In addition to Dr. Allman, the new President-Elect, the following officers were elected:

Dr. F. S. Crockett of Lafayette, Indiana, Vice President; Dr. George F. Lull of Chicago, Secretary; Dr. J. J. Moore of Chicago, Treasurer; Dr. E. Vincent Askey of Los Angeles, Speaker, and Dr. Louis Orr of Orlando, Florida, Vice Speaker.

Dr. Julian Price of Florence, South Carolina, was reelected to the Board of Trustees, and Dr. Hugh Hussey of Washington, D. C., was named to succeed Dr. Allman. Dr. Robertson Ward of San Francisco was elected to the Judicial Council to succeed Dr. Walter F. Donaldson.

Reelected to the Council on Medical Education and Hospitals were Dr. Guy A. Caldwell of New Orleans and Dr. John W. Cline of San Francisco. Dr. Walter E. Vest of Huntington, West Virginia, was named to succeed Dr. Louis A. Buie on the Council on Constitution and Bylaws.

Elected to the Council on Medical Service were Dr. Carlton Wertz of Buffalo, New York, to succeed himself, and Dr. J. F. Burton of Oklahoma City to succeed the late Dr. A. C. Scott, Jr., of Texas. Named for the three new places created on the Council on Medical Service were Dr. Thomas Danaher of Torrington, Connecticut; Dr. R. M. McKeown of Coos Bay, Oregon, and Dr. Lafe Ludwig of Los Angeles.

Other Matters of Importance

Many important developments of a national medical convention never appear as resolutions of the House of Delegates. Dr. Elmer Hess, retiring President, called special attention to the continuing policy of labor union leaders who took every opportunity to promote the compulsory medical and health insurance administered by the federal government at no cost to the consumer. This pops up on every side.

The incoming President, Dr. Dwight H. Murray, emphasized the personal friendly touch of the old-time practitioner. He said:

> "Our mutual task—both physicians and the public is to regain our individuality. To do so, we must humanize and personalize the practice of modern medicine."

He made several suggestions to physicians and patients for getting back to the "human side of medicine."

To doctors, he suggested that they give more time and personal interest to each patient and that they be frank about illness and conditions. Above all, he said, doctors should be "friendly, patient and sympathetic."

To the public, he said:

> "No doctor is a miracle man. All the advancements of science can't make a sick man well unless he tries to co-operate with his physician.
>
> "So choose your doctor carefully, have faith in his ability, follow his instructions, and give him a fair chance to show he can help you."

Dr. Murray also said that "modern medical care must be looked upon as a matter of teamwork.

> "Modern medical care is a complex service requiring the coordinated efforts of family doctors, all kinds of specialists, chemists, pharmacists, researchers, laboratory and x-ray technicians, nurses, dieticians, and many other groups of auxiliary personnel. All must rightly be considered a part of the medical care teams."

Noting that there is a new interest in the role of the general practitioner, Dr. Murray said many medical schools are "revising their curricula so that they can give their students better-rounded.

(Continued on Page 914)

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Professional men who have studied the microscopic analysis of the Viceroy filter now know why the Viceroy taste is smoother—never rough. Only Viceroy has 20,000 tiny filters in every tip—twice as many filters as the other two largest-selling filter brands. That is why Viceroys are smoother by far—never, never rough. That is why so many doctors now smoke and recommend Viceroys.

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(Continued from Page 912)

better-coordinated preparation for the practice of medicine."

More and more hospitals, he said, also are establishing residency training programs in the field of general practice. He also reminded his audience that the AMA House of Delegates has "urged all community or general hospitals to give proper staff recognition to competent general practitioners in keeping with their merits and demonstrated ability."

Two resolutions were presented reopening the question of contracts with optometrists, which might have continued the very active fight of last year, but the Reference Committee settled the matter in committee. The fight of a year ago is still won. Several resolutions attempted to reopen the question of osteopathy but House members were not disposed to enter the discussion at this time. Many questions await solution, and may come up again in November.

Scientific Sessions

Our Michigan members, besides being interested in the economic and legislative part of the program, took an active part in the scientific accomplishments. The following served as officers of Sections (all are M.D.'s unless otherwise designated): Clarence S. Linwood, Detroit, Secretary Section on Dermatology; Albert D. Ruedemann, Sr., Detroit, Chairman Section on Ophthalmology; Traian Leucutia, Detroit, Secretary Section on Radiology; Grover C. Penberthy, Detroit, Delegate Section on Surgery, General and Abdominal; Wyman C. Cole, Detroit, Secretary Section on Pediatrics.

Presenting papers or opening discussions were: E. Richard Harrell, Jr., Ann Arbor, Discussion on "Dermatomyesitis and Incidence of Associated Malignancy"; John C. Rukavina, Walter E. Block and Arthur C. Curtis, Ann Arbor, "Primary Systemic Amyleidosis"; Hermann K. B. Pinkus, Monroe, Discussion on "Warty Dyskeratomas Resembling Darier's Disease"; Gordon B. Myers, Detroit, Panel Discussion on "Practical Electrocardiography in Surgery in Coarctation of the Aorta" and Panel Discussion on "Lesions of Upper Alimentary Canal Producing Chest Symptoms"; William M. Tuttle, Detroit, Panel on "Heart and Great Vessel Anomalies" with Conrad Lam, Detroit, as moderator; John F. Holt, Ann Arbor, "Pathogenesis of Macrocytic Anemias"; Frank M. Bethell, Ann Arbor, Discussion on "Anomolous Forms of Hemoglobin, Genetic Point of View" with John V. Neel, Ann Arbor, and Wolf W. Zuelzar, Detroit, Discussion.

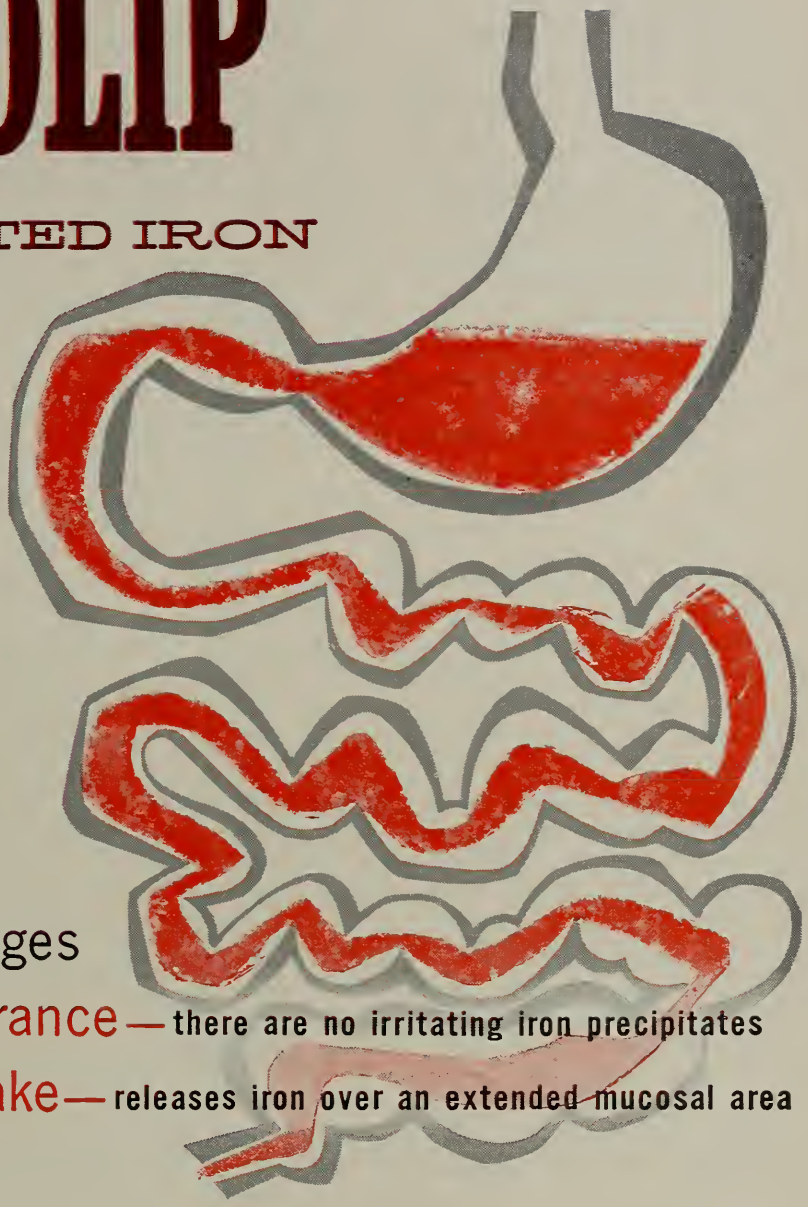
Additional contributions from Michigan were: "Diagnosis of Schistomiasis Mansoni" with Robert T. Lyons, Pontiac, with discussion. "New Instrument for Removing Postnatal Pack," Bernard Weston, Detroit; "Occupational Deafness," Bruce Proctor, Detroit; "Carcinoma of the Nose and Paranasal Sinuses," Harold F. Schuknecht, Detroit, with discussion; "Cause of Death from Ruptured Intracranial Aneurysms," Robert D. Currier, Jose Bebin and Russel N. DeJong, Ann Arbor; "Intraspinal Tumors as Cause of the Pain and Disability," Edgar A. Kahn, Ann Arbor, Discussion; "Carotid Compression in Neck, Significance in Carotid Ligation," E. S. Gurdjian, J. E. Webster, and Francis A. Martin, Detroit; "Foveal Coordination, the Major Factor in Visual Learning" A. D. Ruedemann, Sr., Detroit; "Reactions of the Elements of Retina and Optic Nerve in Common Morbidities of the Human Eye" J. Reimer Wolter, Ann Arbor; "Horizontal Movements of the Eye" Mathew Alpern, Ann Arbor; "Metatarsus Primus in Varus and Mallux Valgus" Donald C. Durman, Saginaw, with Discussion by Joseph Flemming, Detroit; "Beta-Prepielactene in the Preparation and Sterilization of Vaccines, Tissue Grafts and Plasma" Frank W. Hartman and Gerald A. LeGruppe, Detroit; "Plasmecytesis and Cryeglebulinemia", Milton J. Steinhardt, Detroit, Discussion; "Use of Radioactive Isotropes in the Evaluation of Gastrointestinal Function" with discussion by Harold E. Fulton, Detroit; "Hazards of Use of Sympathomimentic Drugs in Ophthalmology" John W. Henderson, Ann Arbor; "Vertical Muscle Imbalance and Scoliosis," A. D. Reudemann, Jr., Detroit; "Selective Segmental Bronchography," with discussion by Lawrence Reynolds; "Inguinal Hernia Repair—Personal Results," Lawrence S. Falls, Detroit, with discussion; "Progress in Surgical Management of Aortic Aneurism," Conrad R. Lam, Detroit, with discussion; "Disappearance of 'Stohe' Shadows in Postoperative Cholangiograms"—Collaborators: Charles G. Johnston, Detroit, and Henry K. Ransom, Ann Arbor; "Repair of Intracardiac Septal Defect," Conrad R. Lam, Detroit; "Repair of Femoral and Inguinal Hernias," Lawrence S. Falls, Detroit.

The following had scientific exhibits: Curtis M. Hanson, Kalamazoo; J. E. Jamison, Dearborn; Clair L. Straith, Richard E. Straith, Joseph D. Carlisle, Burns G. Newby, Detroit; Edward L. Quinn, Frank Cox, Jr., James M. Colville, and Joseph Truant, Detroit; John T. Ferguson and W. H. Funderburke, Traverse City; C. Paul Hodgkinson, Paul W. Pifer, Melvin A. Block, and Donald G. Remp, Detroit; Irving M. Blatt, Philip Rubin, James M. Maxwell, John F. Holt, and John E. Magielski, Ann Arbor; Osborne A. Brines, Detroit; Carl A. Gagliardi and Margaret Stewart-Gagliardi, Detroit; Lee S. Figiel, Steven J. Figiel, and Fred K. Wietersen, Detroit; Lawrence Reynolds, William M. Tuttle, Harold E. Fulton and George F. Boone, Detroit; Joseph L. Pesch, Robert D. Larsen, Kenneth G. Bartells, and William O. Minturn, Detroit; Virgil N. Slee, Hastings, and Robert G. Hoffmann, Ann Arbor.

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tablets	Three FERROLIP* Tablets supply 120 mg. of iron and 360 mg. of choline base. Dosage for Adults: 1 or 2 tablets t.i.d., for Children, 2-6 years, 1 tablet t.i.d.
syrup	Six teaspoonfuls of FERROLIP Syrup supply 120 mg of iron and 360 mg of choline base. Dosage for Adults. 2 to 4 teaspoonfuls t.i.d., for Children, 2-6 years, 1 or 2 teaspoonfuls t.i d.
drops	Each cc. of FERROLIP Drops provides 16 mg. of iron and 48 mg. of choline base. The M.D.R. for infants is 0.5 cc.
supplied	Tablets: Bottles of 100 and 1000; Syrup: Pints and gallons; Drops: 30-cc. dropper bottles.

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AMA Washington Letter

THE MONTH IN WASHINGTON

If medical research doesn't move ahead in the current fiscal year (ending June 30, 1957), it won't be the fault of Congress. The seven research organizations that make up the National Institutes of Health have far more money than they have ever had, and probably much more than their directors even dared hope for last winter at the start of hearings on their budgets. Every one of the research institutes received a substantial increase over last year, and the funds of five of them were almost doubled.

The Institutes have a total of $170.4 million to spend before next July 1. This is about 80 per cent more than they had last year. In discussing the appropriations bill on the Senate floor, Senator Lister Hill (D., Ala.) said the bulk of the money will go for grants to non-federal institutions—hospitals, medical schools, clinics and state and local organizations engaged in research.

A breakdown by disease categories shows the following picture:

For cancer research, $48.4 million, in contrast to $24.8 million for the previous year. This year's total is $16 million more than the administration asked when budget requests were sent to Congress in January.

For mental health work, $35.1 million, in contrast to last year's $18 million. This is $13.4 million more than had been requested originally.

For heart disease research, $33.3 million, compared with $18.7 million last year and $22.1 million originally requested.

For work on arthritis and metabolic diseases, $15.8 million, or $5.1 million more than last year and $2.5 million more than Congress was asked for.

For research in neurology and blindness, $18.6 million, compared with $9.8 million last year and $12.1 million originally requested.

For work on allergies and infectious diseases, $13.2 million, compared with $7.5 million last year and $9.7 requested.

For dental research, $6. million. While this is small compared with money voted for other U. S. research institutes, it is almost triple the $2.1 million spent last year. The huge increase is the result of a sustained campaign by the American Dental Association.

Senator Hill and Rep. John E. Fogarty (D., R. I.) led the fight in Congress for the record-breaking research appropriations. Under the latter's chairmanship, a House appropriations subcommittee boosted the total for the seven institutes to about $124 million, a figure that was accepted both by the full Appropriations Committee and the House.

In addition to heading the Senate appropriations subcommittee that handled this funds bill, Senator Hill also is chairman of the Labor and Welfare Committee and extremely active in health legislation. His subcommittee pulled up the totals to the $170 million. After the Senate-House conference committee disagreed on the spending, Rep. Fogarty carried the fight to the floor, where he persuaded the House to accept all of the higher Senate figures.

Other federal health programs, mainly concerned with disease control and hospital construction, also fared well with the Congress. The Hill-Burton program, for construction grants to hospitals, has $125 million for the current year, or $14 million more than last year. For vocational rehabilitation grants, the figure is $41.5 million, a $2.7 million increase; for general public health assistance to states, it is $18.16 million, a $600,000 increase; for Indian health work, it is $38 million, a $3.3 million increase.

NOTES: With Salk vaccine being released in every expanding volume, the Public Health Service is urging states and communities to increase the priority age to twenty and to use up supplies as fast as received. Said Secretary Folsom: "I urge parents, physicians, and health officials to cooperate in making the maximum use of the increasing supply as soon as it becomes available. . . ."

Civil Aeronautics Administration, believing the time has come to review procedures in pilot medical examinations, has hired a private organization to conduct a thorough investigation and make recommendations. Two questions: Should lower standards be allowed for older, experienced pilots? Should crew members and ground crewmen, as well as pilots, be examined periodically?

Less than three months after his third appointment to a four-year term as Surgeon General of U. S. Public Health Service, Dr. Leonard Scheele resigned to take a post in the pharmaceutical industry so he could "provide more properly" for his family.

Although no new legislation was enacted in that field, witnesses at a long series of hearings on civil defense were pretty much in agreement that the job can't be done properly unless more authority is voted to the Federal Civil Defense Organization.



new Peach-flavored, peach-colored, newest liquid form of the established broad-spectrum antibiotic... TERRAMYCIN®† 125 mg. per 5 cc. teaspoonful; specially homogenized for rapid absorption; bottles of 2 fl. oz. and 1 pint, packaged ready to use.

delightful peach taste in broad-spectrum therapy

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Cancer Comment

PUBLIC WARNING AGAINST HOXSEY CANCER TREATMENT

Following is a release issued April 4 by the Food and Drug Administration, U. S. Department of Health, Education, and Welfare, Washington, D. C.

Sufferers from cancer, their families, physicians, and all concerned with the care of cancer patients are hereby advised and warned that the so-called Hoxsey treatment for internal cancer has been found by the United States Court of Appeals for the Fifth Circuit, on the basis of evidence presented by the Food and Drug Administration, to be a worthless treatment. (The court decisions can be found in Volume 198, Federal Reporter, Second Series, page 273, and Volume 207, Federal Reporter, Second Series, page 567.)

The Federal Food, Drug, and Cosmetic Act authorizes dissemination of information regarding drugs in situations involving imminent danger to health or gross deception of the consumer. (21 U.S.C. 375 (b) This authority has been delegated to the Commissioner of Food and Drugs by the Secretary of Health, Education, and Welfare, 20 Federal Register 1998.)

The Hoxsey treatment for internal cancer involves such drugs. Its sale represents a gross deception to the consumer. It is imminently dangerous to rely upon it in neglect of competent and rational treatment.

The Hoxsey treatment costs the patient $400 plus $60 in additional fees; expenditures which will yield nothing of any value in the care of cancer. It begins with a superficial and inadequate examination of the patient at the Hoxsey Cancer Clinic, Dallas, Texas, or Portage, Pennsylvania. The patient at Dallas is then supplied with one of the following "cancer" medicines: Black pills, red pills, a brownish-black liquid, or a light red liquid. The black pills and the brownish-black liquid contain: Potassium iodide, licorice, red clover blossoms, burdock root, Stillingia root, berberis root, poke root, cascara sagrada, prickly ash bark, and buckthorn powder. The red pills contain potassium iodide, red clover, Stillingia root, poke root, buckthorn, and pepsin. At Portage the patient is given the same "cancer" medication although the colors of the pills are different. The light red liquid medicine is potassium iodide in elixir of lactated pepsin. There is evidence that potassium iodide accelerates the growth of some cancers.

The Food and Drug Administration has conducted a thorough and long-continuing investigation of Hoxsey's treatment. His claimed cures have been extensively studied and the Food and Drug Administration has not found a single verified cure of internal cancer effected by the Hoxsey treatment. In addition, the National Cancer Institute of the United States Public Health Service has reviewed case histories submitted by Hoxsey and advised him that the cases provided no scientific evidence that the Hoxsey treatment has any value in the treatment of internal cancer.

On October 26, 1953, Harry M. Hoxsey, the Clinic, and all persons in active concert with him were enjoined by the United States District Court at Dallas, Texas, from shipping their worthless cancer medicines in interstate commerce with labeling representing, suggesting, or implying that the products are effective in the treatment of any type of internal cancer. While the Government intends to prosecute violations of the injunction, this warning is necessary for the immediate protection of cancer victims who may be planning to take the Hoxsey treatment.

Those afflicted with cancer are warned not to be misled by the false promise that the Hoxsey cancer treatment will cure or alleviate their condition. Cancer can be cured only through surgery or radiation. Death from cancer is inevitable when cancer patients fail to obtain proper medical treatment because of the lure of a painless cure "without the use of surgery, x-ray, or radium" as claimed by Hoxsey.—*Journal A.M.A.* (April 21, 1956, P. 1423) reprinted at the request of the Cancer Coordinating Committee.

From experimental work on skin cancer the active etiological component is ultraviolet radiations of the wave length of about 2,967 Ångstrom units.

Using the existing facts about etiology, a considerable degree of control of skin cancer in populations can be achieved by prevention.

* * *

Today, probably no country in the world has an accurate knowledge of its cancer incidence rate.

* * *

Cancer incidence can be estimated with reasonable closeness from the number of reported cases and the number of undiagnosed cases revealed by autopsies on samples of the population.

* * *

The cancer mortality rate represents the size of the problem in education and research facing a country.

* * *

If every type of cancer is found everywhere and in all peoples, then the causes for these cancers must be ubiquitous.

* * *

Not only does man get lung cancer in every part of the world but his domestic animals and the wild animals about him do also.

* * *

The largest and most important problem today on the etiology of cancer is still the relative importance of extrinsic and intrinsic factors.

* * *

It has been realized in recent years that a racial factor in a cancer, even though shown to be hereditary, does not necessarily mean that it is genetical.

* * *

Recently, the National Cancer Institute estimated that the number of new cancer cases (all sites) increased 34 per cent during the ten-year period 1937 to 1947 and of this, only 7 per cent could be accounted for by the increase in life span of the population.

* * *

There is no indication that one type of benign breast disease is any more precancerous than another. Thus. it is a salutary safeguard to suggest that all patients with benign breast disease be regularly examined at periodic intervals.

* * *

The diagnosis of cancer of the larynx hinges on one word: *hoarseness.*

* * *

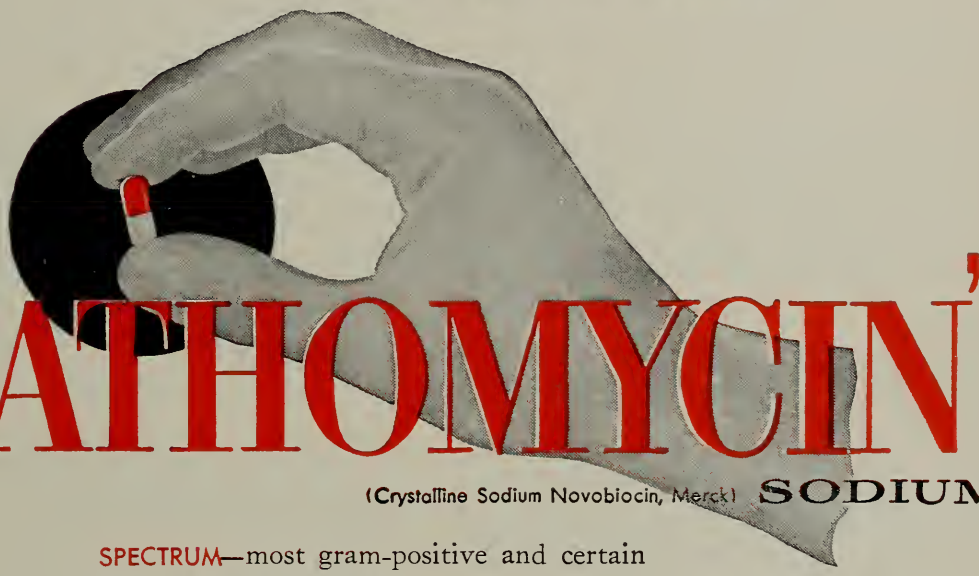
Any hoarseness persisting over two weeks, particularly in people past thirty-five to forty years of age, is cancer until proved otherwise.

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a unique new antibiotic of major importance

PROVED EFFECTIVE AGAINST SPECIFIC ORGANISMS
(staphylococci and proteus)

RESISTANT TO ALL OTHER ANTIMICROBIAL AGENTS



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SPECTRUM—most gram-positive and certain gram-negative pathogens.

ACTION—bactericidal in optimum concentration even to resistant strains.

TOXICITY—generally well tolerated. This is more fully discussed in the package insert.

ABSORPTION—oral administration produces high and easily-maintained blood levels.

INDICATIONS—cellulitis, pyogenic dermatoses, septicemia, bacteremia, pneumonia and enteritis due to *Staphylococcus* and infections involving certain strains of *Proteus vulgaris*, including strains resistant to all other antibiotics.

DOSAGE—four capsules (one gram) initially and then two capsules (500 mg.) twice daily.

SUPPLIED—250 mg. capsules of 'CATHOMYCIN', bottles of 16.

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Michigan Blue Cross-Blue Shield

Annual Non-Group Enrollment

Michigan Blue Cross-Blue Shield will hold its sixth annual statewide non-group enrollment campaign this year during the two-week period running from September 10 through September 22, 1956.

As you know, it is through this special Non-Group program that Blue Cross-Blue Shield is able to extend broad hospital and surgical coverage on a direct enrollment basis to the thousands of Michigan families who are not able to enroll through regular employee, farm or professional groups.

More than 175,000 persons have already enrolled under the Non-Group program in the five years it has been offered on a statewide basis.

Naturally, it is not possible to offer all the benefits of group coverage in a direct enrollment plan. However, because the enrollment period is limited to a two-week period and is offered on a statewide basis, the Blue Cross-Blue Shield Non-Group program is able to offer a good many of the broad benefits of group coverage even on an individual enrollment basis.

During this year's enrollment period of September 10 to 22, the non-group coverage will be open to all Michigan residents under sixty-five. Only condition is that married persons must enroll spouse and unmarried children under nineteen. The spouse can be over sixty-five.

The Blue Cross-Blue Shield non-group plan offers far and away the best coverage available at the price on an individual enrollment basis.

For example, maximum daily room allowance is now $12 a day. All other contract services are provided without limit. Maternity benefits, subject of course to the usual nine month waiting period, are exactly the same as for any other admission, plus routine nursery care for the newborn.

The Non-Group program provides thirty days of hospital care for each family member covered, with another thirty days available each time the member has been discharged from a hospital at least six months.

This year's enrollment campaign will get wide publicity and will be backed with advertising, of course.

But Dr. Wilfrid Haughey, president of Michigan Medical Service (Blue Shield), emphasized that the key to success of the campaign—as it has been in the past—lies in the hands of Michigan's doctors themselves.

"In all five previous enrollment campaigns, the statistics show the physicians played a major role," Dr. Haughey said.

He pointed out that the great majority who have enrolled obtained their information and application from their doctor's office or from their local hospital. And in areas where doctors were most active in backing the drive, enrollment was markedly higher.

"In short, success of the Blue Cross-Blue Shield Non-Group program really hinges on the interest and cooperation of the physicians—that is why I have stressed the key role all Michigan doctors again will play in this year's enrollment campaign," Dr. Haughey said.

By now, all doctors should have received a kit that includes a desk container and an initial supply of Non-Group enrollment folders which have a built-in application card. Also enclosed is a handy order card for an additional supply of folders.

Although the campaign is officially limited to September 10 through September 22, the counter containers and folders may be displayed and distributed to patients as soon as they are received.

However, those who wish to join *must* have the completed application in the mail by September 22, closing date of the campaign, to qualify for coverage.

The presence of even a low degree of cornification in the vaginal smear of postmenopausal cancer patients is indicative of continued estrogenic activity, either from the ovary, the adrenal, or both.

* * *

Carcinoma *in situ* means cancer in its normal or original location. The lesion has been defined as "a condition in which malignant epithelial cells and their progeny are found in or near positions occupied by their ancestors before the ancestors underwent malignant transformation."

* * *

A higher titer of estronase has been found in the blood of postmenopausal patients with breast cancer than in normal menopausal women.

* * *

Bilateral orchiectomy inhibits the growth of primary inoperable breast cancer, especially bone metastases, in male patients.

In Lansing

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The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

VOLUME 55 AUGUST, 1956 NUMBER 8

Responsibility to the Injured

By George J. Curry, M.D.
Flint, Michigan

THERE are ten million persons injured yearly and one hundred thousand killed. Trauma is the commonest cause of death in children up to the age of thirteen. Between one and two million fractures occur each year. The home, automobile and industry furnish the major source. These factors challenge the medical profession. What are we doing about it?

Transportation

Proper immediate care of the injured person often decides the fate, and is an important part of subsequent definitive management. It is hard to separate one from the other. Transportation thus becomes a major problem.

Cranio-cerebral, spine fractures, thoracic, abdominal and motor skeletal injuries make up the list for the most part. Any injury, irrespective of location, should be assessed immediately and handled expeditiously.

The cranio-cerebral injury should be transported gently with the patient supine or prone and the head cushioned. The fractured cervical spine should be transported the same way with the support under the neck. The fractured lumbar spine is transported face downwards. The supine position is acceptable with a support under the back. Beware of jack-knifing! The thoracic injury should be transported in a modified Fowler's position. The fractured lower extremity should be splinted either with a traction splint or with adequate protection by any available rigid material. The upper arm may be bandaged to the lower thoracic wall and the forearm placed in a sling. Suspected fractures of the forearm may be splinted with boards, newspapers or magazines and placed in a sling.

Immediate care and subsequent transportation is handled by ambulance attendants in the large majority of cases. In many localities, morticians control the private ambulance service. It would seem logical that each ambulance attendant should *qualify* for this important responsibility. It is recommended that an educational program be projected in every community and that ambulance attendants be certified as to their proficiency. This program can be further broadened to include police, firemen, and anyone charged with responsibility for the immediate care of the injured person.

On July 21, 1941, Ordinance No. 435 was adopted by the City of Flint, Michigan. On October 17, 1949, Ordinance No. 886 was adopted to amend Ordinance No. 435.

Ordinance No. 886

An Ordinance to amend Ordinance No. 435, entitled "An Ordinance governing the qualifications of ambulance attendants; regulating equipment to be used in first aid treatment by such attendants, and providing penalties for the violation thereof," approved July 21, 1941.

THE CITY OF FLINT ORDAINS:

Section 1. Ordinance No. 435, entitled "An Ordinance governing the qualifications of ambulance attendants; regulating equipment to be used in first aid

Presented at the Michigan Clinical Institute, Detroit, Michigan, March, 1956.

Dr. Curry is Chief, Section for Surgery of Trauma, and Chairman, Committee on Graduate Surgical Education, Hurley Hospital, Flint, Michigan.

He is a member of the Board of Governors, as well as Chairman, Subcommittee for Transportation of the Injured, and Subcommittee on Regional Committees, Committee on Trauma, American College of Surgeons.

treatment by such attendants, and providing penalties for the violation thereof," is hereby amended by the addition of a new section to read as follows:

Section 2 (a). Certificates of fitness as ambulance attendants as provided for herein shall be renewed annually by persons holding said certificates. Renewal certificates shall be issued by the Health Officer as provided in Section 2 hereof for issuance of original certificates. Upon failure of any persons to renew said certificate as herein provided, such certificate shall be canceled by the Health Officer.

Section 2. Any certificate of fitness as ambulance attendant, issued prior to the effective date of this ordinance, shall within thirty days after the effective date of this ordinance, be renewed as provided above; provided, that any certificate issued within one year prior to the effective date of this ordinance shall be renewed annually on or before the date of the original issuance.

Section 3. Penalties for the violation of this ordinance shall be the same as provided in Ordinance No. 435 of which this is amendatory.

Approved this 3rd day of October, 1949.

_____ _____

Mayor Clerk

In December, 1949, the Flint Committee on Trauma, American College of Surgeons, sponsored an educational program directed toward improvement of standards for transportation of the injured. Arrangements were made with all local ambulance attendants, police, firemen, Red Cross representatives, safety directors, et cetera, to attend a series of specially arranged lectures and demonstrations, covering the common types of injuries brought to the emergency receiving department. X-ray and anatomic specimens were demonstrated representing the different types of injuries transported. Ideal methods of handling these injuries were informally discussed. This intensified program was continued for one week and there was full attendance at each session.

The responsibility for this activity was later assumed by the Red Cross in specially arranged programs for ambulance attendants under the direct supervision of a selected instructor. The following subjects were selected: injuries of the extremities, spine and pelvis; drowning and asphyxia; burns; thoracic trauma; abdominal and craniocerebral trauma.

At the conclusion of this training, cards bearing the signatures of the City Health Director, Chairman of the Local Regional Committee on Trauma, A.C.S. and Chairman of the Committee on Transportation of the Injured, were presented to each one completing this course of instruction. These cards, which are certificates of proficiency, expire each year.

The City of Flint has been zoned by the police department and ambulances are directed by special instruction from police headquarters.

There is a chart in the Emergency Receiving Department at Hurley Hospital which contains the name, age, date, diagnosis, manner of transportation, name of ambulance and names of ambulance attendants. This is a permanent and continuous record of activities in each case and a means by which knowledge of good or bad transportation of the injured is obtained. Infractions are referred to the City Health Commissioner, who in turn notifies the ambulance owner and attendants. If three infractions are made, the ambulance attendant is suspended and forced to requalify. This has occurred only a few times.

All ambulances in Flint are inspected by the Red Cross ambulance attendants' instructor twice yearly for proper equipment and the information is recorded.

Flint ambulances are owned by morticians who have co-operated completely.

In December, all ambulance attendants. members of the police and fire departments, state police Red Cross instructors, safety engineers, et cetera, meet in the auditorium at Hurley Hospital. A selected program is presented on common injuries by members of the trauma and resident staffs. Actual case reports with x-ray films are shown so these men have a knowledge of the cases that they might have transported. A question and answer period follows. Special commendation is given to those ambulances and their attendants by name who have established an excellent record. Those who have an inferior record are not eliminated in the discussion. It is at this time that a roster of all the attendants is taken relative to the obtaining of the certification cards for the ensuing year beginning January 1. Appropriate stickers have been designed and presented to those ambulances having good records. These stickers contain the names of the Flint Committee on Trauma and American College of Surgeons.

Among other cities in the United States which have similar ordinances are San Francisco, Butte, Minneapolis, Syracuse and Kansas City, Missouri. Other cities in Michigan are in the process of obtaining ordinances or have established educational programs for groups who handle the injured person. During the past six years there have been many communications from different parts of the United States seeking information concerning the Flint Plan. In some areas efforts are being di-

rected toward making it a mandatory state requirement.

The value of this program was shown conclusively during the Flint Tornado, June, 1953, when nine hundred people were injured within a few minutes and one hundred sixteen were killed. This story, in detail, was published in the *American Journal of Surgery* and the *Bulletin of the American College of Surgeons,* last year.

There has been gradual improvement in the quality of transportation to the hospital. It has been gratifying to observe the interest shown by each ambulance attendant, particularly when he is made to understand that he is part of the whole story in the care of the injured person. During a six-year period, 27,000 ambulance-transported cases were brought to Hurley Hospital receiving room and subsequently admitted. There were seventy infractions considered too bad for transportation. Each year showed a decreasing number.

The Ambulance Attendant

The ambulance attendant participates significantly in the management of an injured person. Since he is responsible for immediate care and transportation to the hospital, his position demands certain qualifications. These should be evaluated on the basis of character, knowledge, personality, health, interest and dependability.

A special educational program must be arranged for his training. This may be done in several ways. Integration of Red Cross facilities under a special instructor has been successful in Flint, Michigan and other United States localities. Instruction may be given by an organized group from hospital house staffs, or under county medical society sponsorship. There are many areas in the United States where committees on trauma exist. These groups are part of the organized postgraduate educational program of the American College of Surgeons and have increased in number and scope during the past thirty-four years. One of their major objectives has been to encourage and standardize more efficient immediate care and transportation of the injured. Since 1949 there has been impressive expansion and improvement. Such committees have organized specific instructional courses for the ambulance attendant.

Since 1941, the Flint Committee on Trauma, A.C.S., and the Section for the Surgery of Trauma, Hurley Hospital, have been especially interested in transportation of the injured.

At Hurley Hospital, during the past six years there has been marked improvement in immediate care and transportation of the injured to the hospital. Each attendant is examined yearly, required to carry a card indicating his qualifications and obliged to take the special course of instruction arranged through the Red Cross curriculum. Ambulances are inspected during each year for proper equipment.

The following is a five-year record indicating the degree of efficiency.

Year	Trauma Cases	Ambulance Cases	Poor Transportation
1950	8,176	4,317	23
1951	8,751	4,452	19
1952	9,187	4,855	17
1953	10,821	6,595	7
1954	10,846	6,383	3
Total	47,781	26,602	69

The following *outlines* the subjects presented in the special educational courses given through the local Red Cross (Flint). Elaboration is obvious. The subjects selected indicate the common types of injuries seen in the Emergency Receiving Department at Hurley Hospital. Lt. Leon Mills, Flint Fire Department, is the special Red Cross instructor in charge of this course.

Position of Victim

Keep patient in comfortable position, head level with body, until you know the nature of the injury.

Examination

1. Look for serious bleeding, stoppage of breathing.
2. Fractures: Find all and splint.
3. Dislocations: Pillow splint for comfort.
4. Burns: Cover area with sterile dressing.

Shock

Maintain body heat. Transport in supine position.

Control of Bleeding

1. Direct pressure over wound.
2. Know pressure points (six important ones).
3. Use tourniquet as last resort.
4. Place sterile dressing over all open wounds and bandage in place.

Internal Injuries

1. Maintain body heat.
2. Keep victim perfectly quiet. Move only when absolutely necessary and in supine position.
3. Turn head gently to one side if victim is vomiting.

Failure of Respiration

1. If victim is not breathing, start artificial respiration immediately (back-pressure, arm-lift method).
2. Use oxygen when victim starts to breathe.

Fractures

1. Splints should be used whenever a fracture is suspected.
2. Fractures may be either open or closed.
 A. Closed Fractures.
 (a) Arm fracture: Bandage arm securely over chest or use two wood or fibre board splints, one on each side of arm.
 (b) Forearm fracture: Splint with pillow or use wood or fibre board splints.
 (c) Wrist fracture: Wood or fibre board splints to palm and under side of lower arm.
 (d) Femoral leg fracture: Thomas half ring splint with traction at ankle. Support splint so heel does not rest on cot.
 (e) Lower leg fracture: Thomas half ring splint with traction at ankle. A pillow or padded fibre board splint may also be used.
 (f) Ankle fracture. Pillow splint or fibre board splint.
 (g) Back fracture: Transport in position as when found (face up or face down). PRESERVE NORMAL ARCH OF SPINE.
 (h) Neck fracture: Traction (applied by hand) on head for neck fracture. Transport in supine position. BACK AND NECK FRACTURES SHOULD BE HANDLED VERY CAREFULLY. HEAD AND BODY AS ONE UNIT.
 (i) Lower jaw fracture: Bandage under chin and over top of head to hold lower jaw in position against upper jaw.
 (j) Pelvic fractures: Transport on back, bind knees and ankles together. Some cases may gain comfort by placing pillows under knee.
 (k) Joint fractures and dislocations. Fractures of the joints should not be moved (elbow, knee, and ankle). Splint with pillow in position found.
 B. Open Fractures: In an open fracture there is a connecting wound to the surface of the skin through which the broken bone sometimes protrudes. These fractures are often more serious than the closed type. Check for serious bleeding and shock. Wounds should be covered with sterile dressings, and the fractures splinted as in closed fractures or with pillow splints if they contain foreign material.

Chest Injuries

1. Rib fractures: If no internal injury is suspected, patient may be transported on his back with head and thorax slightly elevated.
2. Inner chest injury: This may be due to rib fracture or external puncture.
 (a) Cover sucking wound with sterile vaseline gauze so that the outer air cannot enter chest cavity.
 (b) Place victim on injured side and make him as comfortable as possible.
 (c) Sand bag areas showing paradoxical motion.

Dislocations

1. Pillow splint for comfort in transportation.

Burns

1. Cover burned areas with sterile dressings and bandage in place.
2. If large area of body is burned, wrap in clean sheet.

Head Injuries

1. Cover all open wounds with sterile dressings.
2. Avoid pressure at sight of injury.
3. Transport victim in prone position.

Emergency Receiving Department

The Emergency Receiving Department of any hospital should be advantageously located for the reception of patients. It is a nerve center. Active and supportive treatment should be readily available, and organization should be projected to expedite quick action. Efficient nursing supervision is mandatory and should be continuous for twenty-four hours. X-ray facilities should be immediately available at all times. A blood-bank is essential.

In hospitals with house staffs, it is strongly advised that an intern be assigned to emergency service duty full time for selected periods during his training. If there are residents, the intern should be advised to call on them for help whenever necessary as part of his general training. In hospitals without house staffs, selected members of the attending staff may be used.

There are certain prerogatives and limitations which must be projected by an organized educational program in any hospital having a house staff, irrespective of the size of the staff or institution. It is important that when a house officer asks for help, it be immediately available. Delays and indecisions in the problems of trauma surgery are dangerous. In hospitals having active attending staff organization, members should be assigned to active duty at regular intervals and available at all times. It is axiomatic that the patient should be considered as a whole. The patient with multiple injuries represents an acute complex problem and takes priority.

Hospital Management

The patient and his injuries should be individualized. Over-all appraisal is mandatory, with consultation freely requested if necessary. Pride should not enter into such important deliberations. Serious osseous injuries may be definitively managed coincidental with associated injuries, provided the latter are recognized and under control, and the patient has been stabilized. Delay at this point may produce a deconditioning process and the golden opportunity passes.

Events in the history of a traumatized person should have close continuity from the time of injury to the time of discharge. These should include immediate roadside care, efficient transportation, careful emergency department manage-

ment, and proper and timely selection of definitive care. Operative and postoperative facilities in the hospital should be adequate and handy. Outdated equipment should be discarded. Frequent check-up of the armamentarium for the surgery of trauma is recommended. In hospitals where a great deal of this work is done, organization under the direction of a qualified surgeon is a *must* for the maintenance of high standards.

Postoperative Care

Postoperative care must be of high quality to achieve desired results. Intense interest in this on the part of the surgeon in charge keeps the chain unbroken through the house staff, nursing personnel, ward helpers, and orderlies. Nutrition and food balance are obvious. Good bedside care is most important.

Regular conferences are an important part of the organization of any surgical section. *All* cases are seen. "One should be critical of successes and honest with mistakes."

Follow-up care, short and long term, concludes the story. It is not important where and how this is done *as long as it is done*. In larger hospitals with training programs for interns and residents, a regular follow up clinic is advisable. Results are evaluated and the patient is seen by the house and attending staffs. Further end results studies, in groups, complete the chain of events.

Hospitals without house staffs will be obliged to organize the attending medical men to carry out these principles. The surgeon in charge must see that his patient has all the advantages of good management according to simple basis principles.

Education

Educational activities arranged for the profession are strongly recommended. Parts of any county society scientific program and hospital staff meetings should be devoted to the surgery of trauma. Special symposia should be given at selected times during the year in various sections of any state. These can be arranged by local regional committees on trauma, or by a state committee member in those districts where committees do not exist. Diversification of subjects is recommended. The teaching of trauma in medical schools should be revamped, and clinical application of principles made available to undergraduates.

Recommendations

1. The adoption of a City Ordinance requiring certificates of proficiency of ambulance attendants.

2. Educational programs for ambulance attendants in each community, sponsored by the county medical societies, local regional committees on Trauma, A.C.S. and hospital staff organizations. Education programs can be arranged through the local Red Cross by specialized organization or directly by the groups above mentioned. In those hospitals where there are house staffs, instruction can be given by the young men in training. In those communities where there are no hospital house staffs or no hospitals, members of the younger medical group should be delegated for this important activity.

3. A receiving department chart of cases admitted to record the quality of transportation.

4. Ambulances inspected twice yearly as to proper equipment.

5. A well-organized emergency receiving department and efficient organization for hospital care.

6. Regular follow-up management until patient is discharged.

7. The entire story placed in the hands of the proper individuals who will *work*.

NEW ACHIEVEMENTS THROUGH COOPERATION OF SURGEONS AND RADIOLOGISTS

"With surgeons and radiologists working together in the new era of the experimental method, there is expectancy that we may reach goals that have until now seemed unattainable," stated Dr. Frederick A. Coller, of Ann Arbor, in an editorial entitled "The Debt of Surgery to Roentgenology," published in the February, 1956, issue of *The American Journal of Roentgenology, Radium Therapy and Nuclear Medicine.*

"Anesthesia and antisepsis . . . were necessary, fundamental techniques, but surgery could not enlarge its scope . . . without clear-cut objectives demonstrated by this startling new discovery," Dr. Coller pointed out.

"The great advances in surgery in recent years have come from the laboratory to the clinic. The radiologist has played an important part in all these advances . . . he has been a fruitful and stimulating companion traveling with us on all roads to solid achievements," Dr. Coller concluded.

Anesthetic Management in Acute Emergency Situations

By F. H. Van Bergen, M.D.
Minneapolis, Minnesota

EMERGENCY surgery for the *severely* ill or injured patient always has posed a serious challenge to physicians. The critical condition of such patients requires an accurate evaluation of their condition, hurried preparation for surgery, and very astute judgment as to how much additional stress they may tolerate. The ever present threat of mass calamity is indication that each of us must keep abreast with current advances in all fields of medicine and, in the light of these advances, constantly reformulate policies concerning the management of *emergency* patients. Just as gastroenterostomy has given way to gastric resection in the surgical treatment of peptic ulcer, so open drop ether has been supplemented by newer and safer anesthetic techniques and agents. It is the purpose of this presentation to outline the accepted modern anesthetic methods, agents and adjuvants employed in the care of the emergency surgical patient.

Precursory Evaluation of Patients' Vital Physiology Accompanied by Simultaneous Corrective Therapy (First Aid)

The emergency patient often is in such critical condition that certain definitive steps are necessary to sustain his life. These steps must be taken before considering a diagnosis or evaluating the patient from the standpoint of anesthetic or surgical risk. Much of the first aid treatment outlined below will serve as preoperative preparation of the patient.

The Airway.—The airway may be partially or completely occluded by one or more of a variety of causes. Anatomic relaxation of the muscles of the jaw and tongue accompanying the unconscious state, derangement of the supporting bony and muscular structures, foreign bodies including blood and vomitus, laryngospasm resulting from injuries of the neck and brain stem, fractures of the tracheal cartilages, bronchospasm accompanying physical and chemical irritation of the bronchial tree and laryngeal, bronchial and pulmonary edema, are among the more common causes of the obstructed airway.

Treatment of the obstructed airway is of immediate import. Endotracheal intubation with a cuffed Magill tube usually is the best method of effecting and maintaining a constantly patent air passage in the unconscious patient. In addition, inflation of the cuff will prevent further aspiration of foreign substances into the tracheobronchial tree. If the protective laryngeal reflexes are still active, it will be necessary to establish temporarily the continuity of the air passage by holding the jaw and tongue well forward and, if necessary, by inserting an oropharyngeal airway. The reflex activity of the pharyngotracheal mucosa then may be obtunded by translaryngeal anesthetization, after which intubation is easily accomplished.

Translaryngeal anesthetization is accomplished by the insertion of a 20 gauge needle through the cricothyroid membrane into the lumen of the larynx. Through this needle 2 cc. of 6 per cent solution of Cyclaine®* is rapidly injected.

Tracheotomy should be resorted to if the attending physician lacks experience in rapid intubation. A cuffed kink-proof tracheotomy tube is preferable to the standard silver trachetomy tube, especially if anesthesia must be administered subsequently. If the tracheobronchial tree contains aspirated materials, thorough suctioning, employing a specially designed long catheter,** is indicated. By utilizing the curvature of the catheter, it is possible to aspirate selectively both main stem bronchi.

Bronchoscopy should be avoided in the seriously ill or injured patient since this procedure produces

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*Trade mark of Sharp and Dohme, Inc., for its brand of hexylcaine.

**This is a Barbic plastic suction catheter designed especially for the University of Minnesota Hospitals by the C. R. Bard Co., Inc., Summit, New Jersey.

considerable hypoxia in itself. Should it be mandatory to bronchoscope such a patient, the procedure should be well planned and well executed. A high flow of 100 per cent oxygen is supplied through the oxygen feed nipple on the scope. The procedure should be carried out in a lighted room so that the color and ventilatory exchange of the patient constantly may be observed. Any deterioration in vital signs necessitates an immediate withdrawal of the scope and ventilation with 100 per cent oxygen.

Inadequate Ventilatory Exchange. — Even though the patency of the airway be established, an inadequate ventilatory exchange may be present from a variety of causes. Respiratory paralysis is common following head injury, increased intracranial pressure, and injuries of the neck. A marked diminution in respiratory exchange accompanies pneumothorax, sucking wounds of the chest, blast injuries, and atelectasis. The distended abdomen and ruptured diaphragm result in a reduction of the respiratory tidal volume. Excessive doses of anesthetic agents and other depressant drugs are particularly prone to depress respiratory exchange in the severely ill or injured individual.

Concomitant with the establishment of a patent airway, one must initiate artificial ventilation by whatever means the situation dictates. A normal tidal volume and respiratory rate can best be effected by the application of intermittent positive pressure breathing. The simplest methods available are usually the most expeditious. Mouth to mask or mouth to tube breathing for the patient is considered to be the best technique in emergency situations. The Kreiselman bellows resuscitator is an excellent apparatus of extreme simplicity for use in effecting artificial respiration.

In the case of pneumothorax accompanying sucking wounds of the chest, it is essential that the affected lung be re-expanded. This is easily accomplished by holding the chest wound open and applying a positive intrapulmonic pressure of from 10-20 mm. mercury. It may be necessary, because of injury to the lung parenchyma itself, to instigate continuous intrathoracic suction. Distention of the stomach and upper intestinal tract may be relieved by insertion of gastric and intestinal suction tubes. Fowler's position is advantageous to respiration provided the circulatory status of the patient permits.

Inadequate Function of the Cardiovascular System.—The severely ill or injured patient is usually in a state of shock. The physiologic basis for this shock is not well understood and may be due to one or more causes—toxic, humoral, hemodynamic, and psychic. A patient may suffer from normovolemic shock due to extreme trauma, or he may be in a state of oligemic shock because of severe hemorrhage. In both instances the shock is a progressive vasoconstrictive reaction to a reduction in the central circulating blood volume. The chief effect of shock is failure of adequate tissue perfusion with resultant cellular hypoxia. The brain, heart, liver and kidney are the most susceptible organs to cellular anoxia.

Immediate correction of the state of shock is mandatory, since both degree and duration are of prime prognostic importance.[1] Rapid restoration of the circulating blood volume is accomplished by the establishment of an intravenous infusion through a 15 gauge needle. The selection of any vein for this purpose is satisfactory. Often the external jugular veins are visible and palpable when all others are in a state of collapse. A venous cut-down may be necessary. Shock due to hemorrhage is correctable by blood replacement. When blood is not immediately available, plasma or dextran may be used. Slight Trendelenburg position with elevation of the legs will increase the central circulating blood volume. Vasopressor agents are not always indicated in the conscious patient since such patients are usually in a state of marked *hyperexis.*[2] This simply means that their homeostatic response to both trauma and blood loss is so exaggerated that tissue blood flow is markedly decreased by the extreme elevation of peripheral resistance consequent to exaggerated arteriolar and venoconstriction.

Further complicating the picture of shock may be superimposed cardiac failure. Such failure is usually on the basis of hypoxia of the cardiac musculature. This condition is accompanied by elevation of the venous pressure, acceleration of the heart rate, dilatation of the heart, and a low arterial blood pressure. Rapid digitalization may be accomplished with 3 to 5 cat units of acetyl strophanthidin.* administered intravenously.[3]

Inadequate Stress Response.—One of the most recent advances in the care of the severely ill or wounded patient is the recognition and treatment

*This drug may be obtained from the Eli Lilly Co.

of the inability of such a patient to react to stress. Poor stress responses are likely to be seen in aged and chronically debilitated patients, those patients who have been subjected to long periods of mental stress and tension, and patients who have received ACTH or cortisone therapy within the last six months to one year. When illness or injury befalls these individuals their homeostatic response is minimal or absent, and they exhibit a gradual deterioration in blood pressure, pulse and respiration. They respond poorly to such resuscitative measures as transfusion, vasopressors, and cardiac glucosides. Treatment of this condition is simple and definitive. One hundred to 200 mg. of hydrocortisone will effect a marked improvement in the status of these patients.

Pain.—Of last consideration and least import in the first aid treatment of severly ill or wounded patients is the management of pain.[4] In general, these patients are either unconscious or so desperately ill that they do not experience pain *per se*. It is essential that the physician differentiate between the existence of pain and the presence of hypoxia resulting from either inadequate respiration or circulation. Patients suffering from pain not accompanied by tissue hypoxia are oriented, co-operative, and usually do not thrash around. The patient suffering from hypoxia is disoriented, does not complain particularly of pain, and manifests wild confusion.

Opiates and barbiturates are to be avoided until resuscitative measures have restored the patient to a near normal physiologic state. One of the chief dangers in the administration of these drugs to individuals in severe shock rests with the fact that the drugs are not absorbed from either the subcutaneous or intramuscular sites because of profound arteriolar- and venoconstriction. Delay in response to medications often results in further administration of the drug. Then when the condition of the patient improves, the arteriolar and venous channels open and large quantities of drugs are absorbed into the circulatory system at one time. This results in a state of extreme respiratory and circulatory drug depression. It should also be mentioned that these patients, by the very nature of their condition, have an increased sensitivity to anesthetics and narcotics. When these individuals have been returned to a near normal state, one may then control pain through the judicious use of drugs administered intravenously. The doses should be markedly reduced and sufficient time allowed for achievement of maximum effect before repeating. In general, it may be stated that the type of patient discussed here rarely needs a narcotic.

Should one encounter overdosage of an opiate the antagonist, Nalline®,* may be administered intravenously in increments of 5 to 15 mg. In the near future a barbiturate antagonist will be available. (This is beta-beta-ethyl-methyl-glutarimide.)

Evaluation of the Patient as a Surgical and Anesthetic Risk

In evaluating a patient as a surgical and anesthetic risk, it is essential that we consider numerous factors: the severity of the illness or wound, the response of the patient to resuscitative efforts, the age and condition of the patient, the amount of surgical intervention absolutely necessary, and the time available for preparation of the patient are among some of the more important considerations. It also is necessary to take into consideration the complicating diseases and conditions not related to the immediate treatment.

Response to Resuscitative Measures.—The patient's response to resuscitative measures is often an excellent guide to the extent and nature of the operative procedure which may be undertaken. If the patient has had a good response, and his vital physiologic functions have resumed a satisfactory state, then one may assume that reasonably extensive corrective surgery can be accomplished provided careful attention is paid to hemostasis and avoidance of additional tissue trauma. If the patient's response to first aid measures was poor, only the most urgent surgery should be performed and any procedure which safely may be postponed until the patient is in better condition, should be deferred.

Existing Disease Process Complicating Surgery and Anesthesia.—Patients with a history of cardiac disease, pulmonary complications, anemia, liver disease and renal disease must be carefully evaluated.

1. *Cardiac abnormalities.*—

(a) *Coronary artery disease.*—This entity presents many difficulties since it is a problem to

*Trade mark of Merck and Company, Inc., for its brand of n-allyl-normorphine hydrochloride.

evaluate these patients accurately regarding their ability to withstand the stress of anesthesia and surgery. Obviously this type of patient is extremely sensitive to hypoxia. The myocardial circulation makes inadequate adjustments to reduced oxygen tension, leading to further myocardial ischemia. Hypotension on the basis of vasodilatation likewise is poorly tolerated despite the fact that the reduced peripheral resistance places a diminished demand upon the work of the heart. One cannot be certain at what point the reduced pressure will impair significantly coronary blood flow.

(b) *Hypertension.* — Uncomplicated essential hypertension gives little cause for concern unless there is evidence of damage to the heart, kidneys and brain. It is apparent that one must be prepared to combat any significant decrease in blood pressure with peripheral vasoconstrictor agents. However, if the blood pressure is maintained reasonably near normal, these patients tolerate anesthesia and surgery exceptionally well.

(c) *Congestive heart failure.*—Rarely is operative intervention mandatory in the face of congestive heart failure. Surgery should be postponed in the critically ill or injured patient suffering from pulmonary edema if at all possible. Correction of the failing heart and restoration of normal pulmonary function must be considered a part of the emergency first aid care.

2. *Pulmonary disease.*—

(a) *Respiratory acidosis.*—Frequently patients who have required acute resuscitative measures are in a state of respiratory acidosis. The duration and degree of acidosis markedly affects the future course of the patient. Rapid return of the severely acidotic patient to the normal state of acid base balance often is accompanied by a marked fall in blood pressure, cardiac arrhythmias, and sometimes ventricular fibrillation.[5] The concentration of plasma potassium ion rises rapidly as the blood pH is restored to normal.[6] Hyperkalemia is believed to play an important role in the production of ventricular fibrillation. When time and laboratory facilities permit, it is advisable to determine the patient's state of acid base and electrolyte balance.

(b) *Emphysema.*—Patients with severe emphysema tolerate depressant drugs and anesthetics very poorly. These patients are usually suffering from a compensated respiratory acidosis and it is not advisable to upset their acidbase balance picture in any manner.

(c) *Asthma.*—Patients suffering from, or with a history of asthma, deserve special consideration. Many of the anesthetic agents are prone to precipitate bronchoconstriction and should be avoided. Pentothal, cyclopropane and extracts of curare are a few of the offenders. Antihistamine therapy (intravenous Benadryl®) may prove efficacious in the preoperative preparation of these patients. Isuprel®* has proven to be an excellent broncholidator free of the undesirable side effects which accompany the use of epinephrine.[7] Unlike epinephrine it may be used on patients anesthetized with cyclopropane. Decreasing the density of the inhaled gas mixture with helium is of considerable benefit in relieving the dyspnea accompanying asthma.

3. *Liver and kidney function.*—Many drugs depend upon the liver and kidneys for detoxification and excretion. Severely ill or injured patients (especially those who have suffered shock and have received multiple transfusions) exhibit a marked impairment of both liver and kidney function. When such patients are subjected to surgery and anesthesia, there is an increase in the incidence of postoperative hepatorenal failure. It is essential that we select anesthetic agents which do not further impair liver function or increase liver damage. Agents having little or no effect upon the liver are nitrous oxide, cyclopropane, ethylene and the muscle relaxants. Those having only slight effects upon liver function are the local anesthetics and ultra-short-acting barbiturates. Agents which markedly impair liver function and possibly increase liver damage are chloroform, ethyl chloride, trichlorethylene, tribromethanol, divinyl ether and diethyl ether. It should be borne in mind that the ill effects of any of the anesthetic agents are increased many fold if respiratory or circulatory hypoxia exist during their administration.

Patients with severe liver impairment may have a very low level of plasma pseudocholinesterase. In this instance it is wise to avoid the use of depolarizing muscle relaxants whose effect may be markedly accentuated and prolonged under these

*Trade mark of Winthrop-Stearns, Inc., for its brand of isopropyl adrenalin.

conditions.[8] In addition, these agents are not antagonized by tensilon or prostigmine.

Prothrombin production is decreased when impairment of liver function exists or when the liver has suffered hypoxia. The clotting time will be prolonged in such instances.[9]

Renal function is altered by hypoxia, hypotension accompanying shock and stress of any kind. In addition, most general anesthetic agents depress markedly the formation of urine.[10] This depression in renal function appears to be related more to the depth of anesthesia rather than to the specific agent used. In view of this fact, it is essential that urgent surgery be conducted in the lightest feasible plane of anesthesia. Postoperative hypotension should be avoided since these patients are prone to develop a renal shut down at this time.

4. *Metabolic disorders.*—Certain diseases and conditions directly related to disturbances in metabolism warrant special attention.

(a) *Diabetes.*—Diabetes is profoundly affected by certain types of general anesthetic agents. The volatile vapors, ether being the most common, produce profound hyperglycemia and a marked reduction in liver glycogen. Cyclopropane, nitrous oxide, pentothal and the muscle relaxants are the most ideal agents for use in the presence of diabetes.

(b) *Addison's disease.*—This condition is rarely encountered. It is characterized by hypotension, hypoglycemia, and inadequate stress response. It is usually necessary to administer norepinephrine and/or hydroxycortisone continuously during the administration of anesthetic agents.

(c) *Pheochromocytoma.*—This condition is rarely seen. These patients exhibit a marked vasopressor response to both psychic and traumatic stimuli. The hypertension accompanying this tumor may be controlled by preoperative preparation with regitine.

(d) *Body temperature.*—It has recently been shown by d'Amour and Erickson that the environmental temperature plays an important part in the outcome of the severely shocked patient. They conclude that severely ill and injured patients will have a better survival rate at subnormal environmental temperatures.[11]

Transfusion.—Undesirable effects related to citrated whole blood transfusions are of primary consideration in the management of patients requiring urgent surgery.

Bunker[12] has shown that very high concentrations of *serum* citrate resulted following multiple transfusions to patients with liver disease and in all patients during extremely rapid and prolonged transfusions. Ionized serum calcium was depressed to dangerously low levels and severe hypotension ensued. He has suggested the avoidance of citrated blood wherever citric acid intoxication is a possibility.

The pH of stored citrated blood is in the neighborhood of 6.5. Our laboratories have demonstrated that administration of a single bottle of this blood will reduce a patient's pH from 7.40 to 7.25. The progressive hemolysis of bank blood also produces a significant rise in the *plasma* potassium concentration, so that multiple transfusions result in an increase in the *plasma* potassium level of the patient. Here, then, we have several factors involved in the production of an unfavorable state by citrated whole blood infusions: (1) Citrate intoxication leading to a reduced concentration of ionized *plasma* calcium; (2) production of metabolic acidosis; (3) elevation in the concentration of *plasma* potassium resulting from metabolic acidosis and increase in *plasma* potassium resultant from progressive hemolysis.

Crowell[13] has demonstrated an increased tendency for blood to clot in states of severe shock. This results in multiple thrombosis of the portal and pulmonary vessels. He has shown, in dogs subjected to severe shock, that the survival rate can be markedly improved by the addition of 5 to 10 milligrams per kilogram of body weight of heparin.

Choice of Anesthesia

Having considered the first aid therapy, preoperative evaluation of the patient from the standpoint of risk and complications, and having ascertained the extent and type of surgery to be done, one may choose intelligently the anesthetic agent and method of administration. Regardless of the technique of anesthesia employed, one must adhere strictly to a few general principles. The airway must be kept patent at all times. Adequate ventilation using elevated oxygen concentrations must be provided, and the alveolar car-

bon dioxide concentration kept normal. Every effort to avoid deep general anesthesia should be exercised.

Conduction Anesthesia.—Local infiltration and regional nerve block comprise the safest of all anesthetic techniques in either the acutely ill or severely injured patient. This method of anesthesia does not preclude the maintenance of a patent airway and artificial ventilation when needed. As previously described, the patient may be intubated under topical anesthesia, and artificial respiration supplied.

Spinal Anesthesia.—The severely ill or injured patient who has not fully recovered from shock is a very poor candidate for spinal analgesia. The ascent of a spinal anesthetic is accompanied by an ascending paralysis of the sympathetic fibers maintaining vasoconstriction. This in turn results in a precipitous fall in blood pressure. Under no circumstances should a patient in shock receive a spinal anesthetic. Spinal analgesia can be administered only when patients have been returned to a near normal physiologic state.

General Anesthesia.—When it is necessary to employ general anesthesia for urgent surgery, it is essential that certain general fundamental precautions be taken. One must assure himself that the stomach is emptied by gastric lavage followed by continuous Wangensteen suction. To safeguard further the patient from vomiting and aspiration, it has been found advantageous to insert a cuffed Miller-Abbott or Sengstaken tube into the stomach, inflate the cuff, and pull it back against the cardia. This prevents the regurgitation of stomach contents. Intubation should be performed under translaryngeal anesthetization and the cuff inflated prior to the induction of general anesthesia.

1. *Ether.*—It has been shown recently that ether is one of the less desirable anesthetic agents, a belief supported by a great deal of current research. Fisher[14], using the dog heart lung preparation, has shown that cardiac failure with a marked diminution in cardiac output occurs when relatively low blood concentrations of ether are present. Johnson[15] has pointed out that reductions in cardiac output occur in man during ether anesthesia. More recently Brewster[16] of Massachusetts General Hospital has exploded completely the assumption that ether acts as a stimulant to the respiratory and cardiovascular system. He has demonstrated conclusively that the so-called stimulating action of ether is not that of ether at all, but is the result of an increased liberation of epinephrine. Animals and man subjected to total spinal anesthesia, bilateral adrenalectomy or adrenal exhaustion exhibit a marked deterioration of the respiratory and cardiovascular systems accompanying ether anesthesia.

Studies on vascular homeostatic responses by Hershey and Zweifach[17] reveal that: "Ether administration resulted in extensive depression of these responses with sufficient vascular dilatation and endothelial damage leading to an early drastic limitation of these homeostatic responses."

The progressive production of metabolic acidosis accompanying ether anesthesia is a clearly established fact.[18-21] In a more recent study, Radford[22] has shown that the minute ventilation must be increased 20 per cent (lowering the $PaCO_2$ to 30 mm. Hg.) to compensate for this metabolic acidosis. Superimposed upon the metabolic acidosis of ether anesthesia is a respiratory component. This is the result of hypoventilation encountered in the deeper surgical planes of anesthesia and must be offset by constant augmentation of respiration. The ill effects of acidosis have been emphasized recently. Miller and Brown[23] have demonstrated the marked tendency for the development of ventricular fibrillation following sudden release from a state of severe respiratory acidosis. Campbell[24] has shown the increased activity of cardiac vagal effects accompanying acidosis. Young and Sealy[6] have demonstrated a marked rise in the plasma potassium ion concentration resultant from the production of acidosis. Further, they have demonstrated that correction of the acidosis results in an additional increase to sufficiently high levels of potassium for the production of ventricular fibrillation.

When one considers the effects of citrated whole blood transfusions insofar as the production of acidosis and elevation of the plasma potassium ion concentration, it is evident that ether anesthesia can only amplify these undesirable conditions.

2. *Chloroform, divinyl ether and trichlorethylene.*—Contraindications to the use of these three compounds are similar to those listed for ether. In addition, these compounds are a great deal more toxic and potent.

3. *Cyclopropane.*—This is one of the best agents with which to produce anesthesia in the urgent surgical patient. Of all the major general anesthetics, it is least likely to depress liver and kidney function, since it is not detoxified and excreted by these organs. It is also of considerable value since high concentrations of oxygen are administered with it. Some of the difficulties encountered in the use of this agent are its profound respiratory depressant effect and its potential for the production of cardiac arrhythmias. Patients anesthetized with cyclopropane require constant augmentation of respiration. The avoidance of cardiac arrhythmias is mainly a matter of adequate training in the use of this agent. Preoperative preparation with atropine, translaryngeal anesthetization and the employment of flaxedil as a muscle relaxant contribute significant protection against the production of arrhythmias.

4. *Nitrous oxide.*—This is an extremely safe analgesic when used with adequate concentrations of oxygen. It has virtually no effect upon the cardiovascular, respiratory and hepatorenal systems. Its greatest disadvantage rests with the fact that anesthesia sufficient to produce muscular relaxation may not be achieved.

5. *Pentothal.*—It has been recently emphasized that pentothal had been found to be one of the most useful agents for the anesthetization of battle casualties. It is stressed, however, that this drug must be used judiciously. In patients suffering from shock, pentothal must be administered slowly and in small dosage increments. The amount of drug required for the production of narcosis is markedly reduced in the severely ill or injured patient. It is further pointed out that major surgical procedures could be accomplished utilizing only a few cubic centimeters of 2½ per cent solution of pentothal for induction, followed by nitrous oxide and a muscular relaxant for the maintenance of anesthesia.

6. *Muscle relaxants.*—The use of muscular relaxants as adjuvants to anesthesia constitutes one of the greatest achievements of the past fifteen years. Many of the early difficulties encountered in the use of these agents have been rectified, e.g., the newer synthetic products are devoid of histamine liberating qualities, cumulative action, and hypotensive properties. Flaxedil is one of the better muscular relaxants. It produces an increase in cardiac output, an elevation in blood pressure, an increase in pulse rate, and as mentioned before, possesses strong cardiac vagolytic properties. Its action is readily reversed by tensilon. In our institution, this agent has been employed in the treatment of tetanus and has been administered continuously for as long as thirty-three days without ill effect. Succinyl choline is an ultra short-acting muscle relaxant, its duration of effect lasting only three to five minutes. This drug is classed as a depolarizing agent, and should be avoided in the aged, chronically debilitated patient and in patients suffering from liver disease, since their plasma concentration of pseudocholinesterase may be low. Its action is not antagonized but is potentiated by tensilon or prostigmine.

7. *Chlorpromazine.*—Most recent among the adjuvants to anesthesia is chlorpromazine. This drug is a powerful potentiator of narcotic, soporific, analgesic and anesthetic agents. In addition, it has the peculiar property of diminishing the incidence of nausea, vomiting and hiccups. The anesthetic potentiating effect of chlorpromazine may be used to great advantage in the management of the urgent surgical patient. For example, abdominal surgery may be performed satisfactorily using a gas mixture of equal parts of nitrous oxide and oxygen and small doses of muscle relaxants when the patient has been prepared preoperatively with chlorpromazine. Since chlorpromazine has a hypotensive property of its own, it is necessary to prepare the patient by intravenous administration of 2 mg. increments spaced two to three minutes apart until from 10 to 20 mg. have been given. Using this technique, the blood pressure can be monitored constantly and precipitous falls avoided.

Anesthetic Management of Some Common Emergency Surgery Problems.—It is advisable to mention some of the more common anesthetic problems encountered in urgent surgery.

1. *Intracranial operations.*—Certain anesthetic precautions must be observed in the management of patients with head injuries or cerebral vascular accidents. These patients often show signs of increased intracranial pressure. The respiratory and vasomotor centers may be affected. Should the conduct of anesthesia result in further increase

in intracranial pressure, vasomotor collapse, respiratory paralysis, increased intracranial hemorrhage or rupture of an aneurysm is likely to occur. The induction of anesthesia, therefore, must be carried out in such a manner as to safeguard against any further rise in blood pressure. This is best accomplished by the administration of pentothal and a muscular relaxant in such quantity as to paralyze completely the patient. Following this induction dose, artificial hyperventilation is performed for a minimum of three minutes. The patient is then quickly intubated and hyperventilation continued. Careful monitoring of the blood pressure will reveal that frequently this type of induction and intubation produces a fall in pressure. In this particular instance, the hypotension achieved is desirable.

Following intracranial surgery, there may be a depression of respiration or even apnea, and certain protective reflexes such as coughing and swallowing may be obtunded. When these signs are present or anticipated, it is desirable that an elective tracheotomy be performed before the patient leaves the operating room. This precaution will enable nursing personnel to keep the tracheobronchial tree free of foreign material.

2. *Fractures of the jaw.*—Fracture of the jaw often accompanies multiple injuries incurred in automobile accidents. Since correction of the jaw deformity may necessitate wiring of the teeth, the attending surgeon is faced with one of two alternatives. He may postpone treatment of mandibular fractures in deference to the other injuries. When surgical treatment of these has been completed, mandibular immobilization may then be undertaken. If, however, the other injuries incurred necessitate several operative procedures requiring a period varying from a week to a month, it may be desirable to repair the jaw fracture at an early date. When the surgeon elects to do this, then he must perform a preliminary tracheotomy so that a patent airway will be assured for all future operations. Attempting general anesthesia (or even major surgery under spinal anesthesia) in a patient whose mandible is immobilized is extremely hazardous and can only be condemned.

3. *Injuries to the cervical spine.*—Some fractures and/or dislocation of cervical vertebra can result in spinal cord injuries, one must be particularly cautious about intubation. Direct laryngoscopy and intubation often require considerable extension of the neck. Since such extension may result in cord injury, it may be desirable to attempt intubation blindly through the nasal route without disturbing the position of the head. Should blind insertion of the tube fail, it is often possible to insert the tube working with the MacGill forceps through the laryngoscope, without disturbing the position.

4. *Intestinal obstruction.*—Vomiting and aspiration during the induction of anesthesia in patients with intestinal obstruction constitutes one of the most common causes of anesthetic mortality, but at the same time, one of the most preventable causes of death. Preoperative decompression by continuous Wangensteen suction and endotracheal intubation with topical anesthetization, as previously described, completely circumvent this hazard.

5. *Burns.*—Anesthesia for the surgical treatment of burns requires no special consideration providing the patient has received adequate antishock therapy and the fluid and electrolyte balance are normal. In general, burns may be managed best under very light general anesthesia.

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Accident Proneness

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ACCIDENTS resulting in death or injury are a matter of increasing concern in our society. Much thought and effort in the last two decades has resulted in a decrease of accident rates, but accidental fatalities still constitute the major single cause of death between the first and thirty-sixth years of life. More than 9,000,000 injuries, with at least a temporary total disability, are reported each year, and over 90,000 of these are fatal. The cost, direct and indirect, of accidents is estimated at about $10,000,000,000 annually.[1] The social and economic importance of accidental injuries is increased further by the fact that so many young people and heads of families are affected. Of the various professions dealing with the problem of accidents, physicians have major interests in the prevention of fatalities, the diminution of permanent disabilities, and in the decrease of morbidity. Much of our work deals with the treatment of injuries but we also have contributed toward their prevention.

That efforts at prevention can be fruitful is exemplified in industry where such attempts have been most persistent. The industrial units reporting to the National Safety Council have shown a drop in injury and death rates to about one-third of what they were some twenty years earlier.[1] Various approaches in the fields of transportation and home accidents have shown at least temporary improvement, even though our knowledge of the causes of accidents was quite uncertain and the attempts at their prevention were largely empirical and often haphazard.[2,3] Much work has been done on the problems of accidents and over a thousand publications are available in this area. In general, the studies have been either statistical or clinical in nature. We have learned much of actuarial import and can tell fairly well what parts of the body are likely to be injured at what time of day or year, and we have a considerable amount of data in regard to a variety of individual factors related to accident frequencies. There is, however, still a great deal of controversy and disagreement about some of the basic questions of causation. Evidence seems overwhelming for the conclusion that no single factor is the cause of any large group of accidents and that attempts to find a universal pattern for accidents are doomed to failure. A study of some 95,000 work accidents in 1952 indicated that in all but 5 per cent of these there was an "unsafe condition" of a mechanical or physical nature present, and that all but 5 per cent had some "unsafe act" of a personal nature associated with them.[1] Of these accidents, 90 per cent were judged to entail some combination of both external and personal factors. There is valid statistical evidence to show that accidents are related to such factors as intelligence, attitude, alcohol, drugs, morale, fatigue, or emotional stress; but the correlation of any one of these factors with accidents generally is relatively low and none could be used alone to explain the cause of accidents. The more complex and obscure factors of personality traits or emotional constellations of the individuals involved in accidents are difficult to deal with especially in any statistical study. Without an understanding and an evaluation of the personality or mental factors which might play a role in accident causation, however, no satisfactory program of prevention can be developed. We must ask and try to answer such questions as why an accident occurred at this particular time, although the "unsafe condition" was there all along; why to this particular person when others were exposed as well?; why some people have a disproportionate number of accidents?; and also why children guarded by some mothers suffer more injuries than others.

Though we assume that a number of external and personal causal factors, occurring in combination, are responsible for the vast majority of accidents, we cannot ignore the fact that most accidents also represent bits of human behavior, and that the behavior of people is related to their

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Presented at the Michigan Clinical Institute, Detroit, Michigan, March 7, 1956.

emotional states and their personality patterns. There are various indications in the literature that such temporary emotional states as anger, resentment, defiance, depression, worry, guilt, or tension are positively related to accidents. There are also studies suggesting that individuals with a history of repeated contacts with courts, social agencies, or credit institutions, or with records of traffic or disciplinary violations, are more apt to have accidents. People with a history of alcoholism, or of habitual use of self-administered drugs, appear also to be more liable to accidents. Finally, there is ample evidence that individuals who have had previous accidents are more apt to repeat in the future. Temporary disturbed emotional states are certainly more likely to occur in some individuals than in others. The more prolonged histories of agency contacts, conflicts with authority, or of habitual use of chemicals are even more clearly related to the personality of the individual. In connection with a study of vehicular accidents, Tillman & Hobbs said that "a man drives as he lives," and McFarland, who is generally skeptical of personality factors, finds much promise for prediction of accident liability in "style of life" indices.[2,4]

Over thirty-five years ago, a study of minor industrial accidents in Britain indicated that these were not distributed at random.*[5] A study from Germany a few years later showed similar results.[6] Too large a number of individuals had repeated accidents while more than expected had none, although all were assumed to be exposed to the same risks. Since then various statistical investigations have supported and augmented the concept that some people have a propensity for repeated accidents or are "accident-prone." This concept has gained much attention from various transportation and manufacturing concerns as well as from most insurance companies. Accident repeaters have been weeded out or used in less risky jobs. One utility concern shifted its chief accident repeaters to nondriving jobs and reduced the rate of its vehicle accidents to one-fifth of its previous frequency.[7] The meaning of accident proneness has been interpreted differently by various writers. In some survey studies, it appears to refer to any one or more personal factors of the individuals who have more accidents than they are entitled to statistically, while in others "proneness" is conceived of as a specific unknown or known basic personality trait which directly leads to accidents. Some apparently exaggerated statements have been made about accident proneness, such as that 10 to 15 per cent of the people are responsible for 80 to 90 per cent of the accidents in their group. More reliable seem to be the indications that accident habits tend to persist and to carry over to other situations or activities. Also, that the frequency of minor injuries parallels the individual's rate of major accidents. More recently new or recalculated statistical data was used to invalidate the claims of the great importance of accident proneness in the causation of accidents. In one extensive study it is called a "fiction of accident-proneness," apparently because an inherent specific personality constellation could not be statistically validated.[2] Elsewhere in this study, however, the evidence regarding "proneness" is called only scanty or "unfortunately equivocal," and the term "accident repeaters" is advocated instead.

Clinical psychoanalytic studies in the late twenties described patients with neurotic tendencies to punish themselves in response to their persistent unconscious guilt feelings. In two such patients described by Fenichel, accidents also occurred, though they are mentioned only incidentally.[8] In the thirties, several clinical papers dealt with neurotically determined accidents. These showed that some people suffer accident injuries for specific though unconscious mental reasons or that they hurt themselves "accidentally on purpose." Flanders Dunbar and her colleagues published the result of a study of a group of fracture cases which they had intended as a control for a group of coronary disease patients.[9] She was surprised to find a high rate of previous injuries and considerable psychic pathology related to the causation of their fractures. She treated her findings statistically and abstracted characteristic personality patterns for accident prone persons.[10] These were described as impulsive, independent, self-reliant, having a tendency to appear casual about their personal feelings. Their emotional situation at the time of the accident was often that of anger at authority and they showed guilt after the injury. As a result of this study, mainly, the term "accident proneness" assumed a more specific meaning in which purposiveness and even a specific dynamic conflictual mental pattern was assumed to be present.

*Greenwood & Hobbs coined the term "accident-prone."

The clinical studies of individual patients, particularly of those with a number of accidents, are particularly convincing in showing that some individuals take an active and apparently purposive part in the production of their accidents. Karl Menninger described a patient who had twenty-four major accidents, including the wrecking of eleven automobiles, in whom guilt over hostility to others led him to seek expiation through hurting himself.[11] A similar emotional situation existed in a thirteen-year-old boy whom I saw after he had had many accidents, including four which caused major fractures and an amputation of an arm. He also had a record of delinquency and was later convicted of a slaying. How close anger at oneself is to hostility toward others is exemplified here. I also saw two young women with the symptom of compulsive self mutilation, one through the use of burning cigarettes and sharp instruments, who gave a previous history of many minor accidents, and the other, who mostly used her finger nails during sleep and who had managed to hurt herself accidentally by a fall or a sprain whenever she and her family succeeded in preventing her scratching by tying her arms for the night. In both, strong unconscious demands for solicitude, as well as much unconscious guilt, were present, together with a more obvious resentment of their parents. While the unconscious need to punish oneself in order to alleviate guilt is the most commonly described motivating factor in accident proneness, other emotional situations may play a role. At times the injury to oneself appears to be an attempt to forestall a worse punishment or to gain permission to indulge again in forbidden fantasies or acts. Accidents may serve as a means of gaining affection and dependent care, and this purpose may later be continued in a compensation neurosis. In some children the injury seems to have the purpose not only of gaining love but also of punishing someone close to them, in whom they are disappointed and whom they want to make sorry.

The occurrence of a specific accident in an individual who has a persistent psychologic need for it may be precipitated either by the presence of an opportune situation which he then utilizes or by a temporary increase in the need to expiate a sin or to gain some other advantage for himself. All of this happens, of course, without any conscious awareness of the patient and in spite of his conscious efforts. Concern over a sick child or an unhappy wife which is associated with guilt, or an impulse to do something prohibited by the person's conscience, are typical examples of what might accentuate the need for an accident. Some of these patients may have many minor accidents such as cuts or abrasions without stopping to pay attention or being able to remember the incidents. We see patients with similar guilt or self-punitive tendencies who manage, instead of accidents, to get repeated surgery. Others make themselves suffer through psychogenic illnesses or by repeatedly spoiling all imminent successes in their life. Aside from a basic need for self-punishment in accident repeaters, clinical findings indicate that these patients are also likely to have a general tendency to act-out their problems. They are described as impulsive, active individuals who deliberate little and do not talk easily about their emotions or inner problems.

Just how important the personality or emotional characteristics of the individual are in the vast number of accidents is still very much in dispute. We do not as yet have reliable psychologic tests which can help us to predict the individual's accident potential. Clinical psychiatric examinations of pilots has been reported of value. A close contact of flight surgeons with pilots with the aim of preventing dangerous missions of pilots under unusual emotional stress has been used as a means of diminishing accidents. So far, a history of repeated accidents in the past, whether minor or otherwise, and evidence of an aggressive, impulsive or unstable pattern of life seem to be the most reliable criteria for predicting accidents in the future. Whether accident-proneness is a major or relatively minor factor in accident rates we do not know at present, but that accident-prone individuals exist is certain, and that they need to be considered in the problem of accident causation seems obvious. Better methods and tests are needed to find and evaluate the accident liable individual. These could lead to a better understanding of the problem of accidents and to more rational programs of prevention.

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Prevention of Accidental Trauma

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WE are all aware of the remarkable achievements in disease prevention in the past several decades. Vaccines and antibiotics have made preventive medicine a reality in everyday practice. As a result, most infectious diseases can be controlled and some have been virtually eliminated as major causes of death. With these medical triumphs, new health problems have emerged to command the attention of the medical investigator, the health officer and the practicing physician. One such problem, accidental trauma, is of staggering proportions.

In 1954, 89,432 Americans lost their lives by accidents. Only cardiovascular disease and cancer deaths now exceed those due to unexpected injury. Accidents are the leading cause of death from ages one to thirty-five; second to heart disease in the age group thirty-five to forty-four; and outranked only by cardiovascular disease and cancer among persons forty-five and over. In contrast to cancer or circulatory disease, accidents frequently take the lives of many in childhood or in their prime.

The Menace of the Machine

An important factor in the accident problem is the machine. In 1954, 35,586 Americans were killed, and about 1,250,000 were injured in automobile accidents. Farm accidents due to increasing mechanization of the farm are all too common. Industry has made great progress in protecting man from the hazard of machinery; nevertheless, in 1954, 14,000 workers lost their lives from accidents on the job. The home, almost as mechanized as a factory, especially with the growing popularity of power tools for home workshops, is nearly as dangerous as the highway. In 1954, 27,500 persons died in home accidents. The machine, a proud symbol of our modern age, is now almost as great an environmental hazard to man as bacteria.

Like the visible portion of a towering iceberg, these statistics are but a small part of the total picture, revealing only a fraction of the total social and economic loss. For example, the value of property destroyed and damaged by traffic accidents in 1954 is estimated at $1,600,000,000 and all costs, including medical expenses, were $4,400,000,000. For every fatal accident, it is estimated there are at least 100 serious enough to cause disability for a day or more. If we consider all United States battle casualties in World War II, the number of those killed, wounded, and taken prisoner combined was about one-eighth of the accidental injuries in this country in 1954.

These facts mean that treatment of accidental trauma is an important and growing part of a physician's practice. But until recently, the prevention of injuries has not occupied the attention of any large segment of the medical profession. Prevention has been left to safety organizations. The National Safety Council and its state and local affiliations are doing a fine job, especially in public education, in industry and through the schools, farm organizations and highway safety programs. But the National Safety Council has been among the first to indicate that this country cannot have a comprehensive accident prevention program without the active participation of organized medicine and public health agencies.

Because, as physicians, you so often see the brutal and tragic results of accidents, you can also see the need for more adequate study and control of this waste of human and material resources. By your training as well as experience, you can, if you will, make important contributions to accident prevention. Prevention must be based on adequate knowledge, but accident research is not yet well developed. Knowledge about the cause of accidents is somewhat comparable to our knowledge of disease etiology a century ago. Then, diseases were identifiable, but exactly why and how an individual became ill and died was largely un-

Presented at the Michigan Clinical Institute, Detroit, March 9, 1956.

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known. Today, too little is known about the circumstances which lead up to and precipitate accidents. Even less is known about such important influences as the health, personality and behavior of people who have accidents.

The need to focus on the individual is one of the most important reasons for physicians to participate in safety programs. By training and experience, the physician is best equipped to judge the importance of physical and emotional factors which may contribute to accidents. Because the physician has the responsibility for treating the accident, closer co-operation between safety authorities and the medical profession in the investigation of how and why it occurred is necessary. Physicians can also contribute by community leadership and instruction of patients concerning common accident hazards.

The two age groups with the highest accident fatality rates are the very young and the very old, and most accidents in both these age groups take place in or around the home. Both are outside the influence of the organized safety work carried on by schools, industry, and highway safety groups. The physician, as family health counselor, is well qualified to take the leadership in studying and working to prevent accidents to those under five and over sixty-five years of age.

Education

The physician as family counselor in child rearing has the opportunity and the responsibility to include accident prevention advice in the health supervision program for the child. This advice has been likened to a new vaccine to be offered—but it is an immunization to be given to the parents rather than the children.

The "vaccine" is intended to increase parents' knowledge, understanding, and confidence in child management and care. Its administration should be timed to help parents anticipate risks for which reasonable precautions can be taken at various stages of development. Accident prevention education handled in this way becomes a natural part of the child-rearing program and is not likely to produce attitudes of anxiety, fear, and overprotection. The "dose" and the "technique" of safety education are matters of professional judgment. The child's personality, his muscular co-ordination, his physical environment, and the parents' emotional attitude toward the child and the doctor, are factors which determine *what, when* and *how much* should be given.

To help the physician in determining the "dose" and the "technique" there are many suggestions by authorities in this field. For example, Press has proposed that physicians give parents a home safety check list about the time the child is eight months old. At this age, the accident hazard begins to increase. A check list on home and child safety may be obtained from the local health department or safety council. Such a list, presented to the mother, taken home, filled out carefully and at a subsequent visit discussed with her, will do much to impress the whole family with the importance of the subject. The Children's Hospital of Boston has published a useful booklet on the prevention and first aid handling of pediatric emergencies which every home with children should have. The Cincinnati Children's Hospital also recently published an excellent pamphlet on this subject.

When the physician makes a home visit, there is opportunity for education, too. Finding and advising corrective measures for such accident breeders as a carelessly placed roller skate, a medicine cabinet easily accessible to little hands or an unguarded stair or window may be as significant a contribution to preventive medicine as recommending the removal of a pair of diseased tonsils. Such "environmental inspection" is an effective way to educate. Most people must have their attention directed to hazards before they recognize them.

We have no accurate information on the number of physicians who give child safety instruction to their patients, but from the interest in these publications just described we believe it is increasing. Eighty-five per cent of the membership of the American Academy of Pediatrics reported to our committee that they now give such guidance as a part of health supervision. We find that some physicians have their own child safety check lists; some use a bulletin board where they post news clippings of accidents or other material.

Children are not the only age group for whom safety education is important. The physician should keep in mind also the hazard to which the housewife is exposed, especially in her workshop, the kitchen. Men, too, are prone to injury in the home, especially in connection with home repairs. Special precautions should be taken by the elderly and those who are supervising their care to prevent falls. In other words, the safety "vaccine" may be used in all ages. To sum up its

use in everyday practice, there are five factors which must be considered if we are to develop a satisfactory "titre" of accident "antibodies."

1. We have to know the common or likely hazards at certain months or years of age. We have some data on this but need to accumulate more through research. We must develop effective means of discussing these hazards with patients in a manner which will encourage constructive action without creating unnecessary fear or alarm, or, equally important, feelings of guilt if a serious accident does occur.

2. We must be familiar with characteristic behavior and drives at certain ages.

3. We must point out the effect of a disregard of safety practices on the part of the adults. The value of a good example to children cannot be overestimated.

4. We must know the physical, emotional and intellectual capacities of the patient.

5. We must know the environment, not only the physical setting, but the emotional climate in which the individual is living.

Community Service

Another important aspect of the accident prevention program is community service. An increasing number of physicians are active in their local safety councils and are also co-operating with other community groups. At our Committee headquarters in New York not a day goes by that we do not get a request in our office from a practicing physician for speech outlines and slides we have prepared for use with professional or lay audiences. These talks to lay groups are impressive examples of public service by the medical profession. Accident prevention is an ideal subject for the public education or public relations program of a medical society.

Investigation and Study

In order for safety education to have significance, considerable knowledge must be accumulated about accidents in the community. A study of the frequency and types of accidents in one's practice or of those admitted to the emergency room of the hospital may be the starting point. How these contribute to the development of a program is illustrated by our experience.

A survey to secure more information on certain types of accidents in pediatric practice was made among the 3,000 members of the American Academy of Pediatrics. Half of the case reports received were due to poisoning; thirty per cent were cases of burns.

Childhood Poisoning

Nearly 500 deaths due to accidental poisoning in children are recorded annually in this country and the mortality reveals only a fraction of the problem. For every child death from poisoning, there are probably more than 100 cases serious enough to be brought to a hospital. Most of these poisoning deaths in children are at ages under five years, the great bulk concentrated between the ages of one and three.

The difficulty of diagnosing some poisoning and the possibility that other causes of poisoning are being overlooked have led us to the conclusion that in large population centers satisfactory facilities for toxicologic examinations should be available to all physicians. The increasing use of new chemicals for insecticides and other purposes in our daily living increases the need for this special laboratory facility. Equally important is the need for a poison-information center where the doctor in an emergency can get advice on the possible toxic agent in a proprietary product and advice on therapy. With the aid of these facilities, practicing physicians as well as hospitals would be able to practice more scientific medicine not only in children but also in adults, especially those who may be exposed to toxic chemicals in their work.

Another aspect of the poisoning problem which calls for organized action is more informative labeling. In an emergency, the family as well as the physician may be working in the dark or even lulled into a false sense of security if the product swallowed by the child gives no hint of potential danger by misuse.

In adults, too, drugs are probably underestimated as a factor in accidents. This might well be the subject of study by an accident prevention committee of a medical society. Sometimes an uninformed individual undertakes self-medication with an unfamiliar potent drug. He may think if one dose is good, two doses are twice as good. Or he may take a drug under the wrong circumstances and end up not only accidentally intoxicated, but also involved in more disastrous situations. Bromides, alone or in combination with

barbiturates, or alcohol or chloral hydrate, seem to be common types of dangerous self-medication.

Burns

We have mentioned burns as the other area of study and action which has grown out of our survey of accidents in pediatric practice. Our survey revealed that 30 per cent of all cases reported were burns; 60 per cent of these were associated with flammable clothing. Burns are the second most frequent cause of fatal home accidents and account for about one-fifth of the total. Colebrook found that 70 per cent occurred in children under fifteen, and 53 per cent in children under five years of age. This study made in England on 2,000 consecutive burning and scalding accidents admitted to the Birmingham Accident Hospital showed that two factors were largely responsible for the seriousness of the burns: (1) contact with an unguarded fire, and (2) ignition of clothing.

There has been insufficient study of the relationship of flammability of clothing to burns. Only when there are sensational episodes, such as the cowboy suits a few years ago and the torch sweaters recently, is the public made aware of the relationship of clothing to burning accidents. With the increasing use of synthetic fibres in clothing, it would appear more important than ever to prevent, by suitable pretesting, the sale of dangerous fabrics, especially for use in making children's clothing. In burn injury cases, a sample of the clothing should be obtained if possible and subjected to a flammability test. A standard method for testing has been developed.

Traffic Safety

It is shocking to discover how little evidence we have on the relationship of physical or emotional impairments to traffic accidents. The medical profession, through appropriate authorities and committees, might give more study to physical and emotional health of the 72,000,000 licensed drivers in the United States. Again we need to pay special attention to the young and the old. We cannot ignore the fact that the highest traffic accident rates are in youthful ages. Since 1933, while the death rate from motor vehicle accidents in persons age five to fourteen declined about one-third, in those fifteen to twenty-four it has increased almost 50 per cent. Young drivers are a danger not only to themselves but to others. Chronologic age is not a criterion of maturity, either in judgment or skill, and studies should be made to determine the value of certain types of physical and psychologic examinations to this problem. At the other end of the spectrum is the aging driver. It is not uncommon to see news items of auto accidents in which an elderly driver is reported to have lost control of the wheel and died of a heart attack while driving.

Preventive Measures

We believe the time has come for the medical profession to assume a role of leadership in the prevention of accidental trauma. We suggest that the component units of organized medicine form committees to develop and carry out accident prevention programs in co-operation with other appropriate and interested agencies. The program ought to embrace all age groups but be focused where the results may be most fruitful. This appears to be at the beginning period of life, not at its terminal stages—though these should not be ignored. Such a program might embrace the following ten points:

1. Determine the magnitude of the problem in the community.

2. Learn what is being done about it.

3. Decide the special contribution of organized medicine in solving some of the problems. In this connection, the role of the Women's Auxiliary should not be overlooked.

4. Give particular attention to safety in hospitals and office practice.

5. Co-operate with those who are trying to enforce safety laws and to develop such laws.

6. Plan medical society meetings, e.g., using accident cases to emphasize causes and means of prevention.

7. Encourage more accurate and complete accident records and death certificates. Histories should include how and why the accident occurred.

8. Develop centralized information service for poisoning emergencies and toxicologic examination.

9. Teach patients safety, urging special caution in presence of physical or mental impairments.

10. Urge physicians to practice safe habits themselves.

Medicine and public health have played major roles in the battle which man has been waging

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New and Old Methods of Managing Burn Wounds

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I SHALL begin with three vital statistics. The first concerns the relation of depth of burn to survival. A partial burn which does not require skin grafting has about one-half the killing power of a full-thickness burn of equal area. Unfortunately, unless burns are extremely deep, one cannot classify them on clinical grounds with authority at the time of injury. Last month a preliminary report to the Detroit Surgical Association by Dr. James Bennett of the University of Michigan, however, indicated that a differential in the takeup of radioactive phosphorus distinguishes deep partial from full thickness burns.

The second statistic concerns the influence of age upon survival. At age 30 the tolerance begins to fall—at first slowly, then sharply. While we all accept the proposition that increasing age brings increasing surgical mortality, this curve seems particularly stark.

The third statistic is that in the past fifteen years, there has been no decline in the mortality from full-thickness burns of over 35 per cent. Although many patients live longer, the ultimate survival rate is unchanged. Some patients with 90 per cent burns have been kept alive for three somewhat meaningless weeks. It is obvious that the therapy of shock has far outstripped the remainder of our therapeutic armamentarium. An important advance in our understanding has been the realization that when burned patients are toxic, the probable cause is a state of systemic bacterial invasion; culture of the blood will provide the evidence.

What, now, are the focal points of interest about burn wounds? There is a growing interest in studying, and perhaps influencing, the factors that determine the extent of tissue death following burns. The skin is a good insulator and heat is not readily transmitted through it. Perhaps death of the deep portion of the skin may occur as a complication of the burn rather than only because it is irreversibly cooked. It is possible that if vascular stasis and thrombosis, lymphatic blockade, and increased capillary permeability were less severe, tissue death would also be less extensive. Evidence from experimental burns in animals suggests that heparinization decreases tissue death, as it does in experimental frostbite. It has long been recognized that immediate immersion of burns in cold water relieves pain; last year, however, Price demonstrated that a reduction in tissue death is probably also brought about. That the application of cold water immediately after the burn will diminish edema and altered capillary permeability is graphically illustrated by a repetition of one of Price's experiments. A protein-bound blue dye escapes from the circulation to a far lesser degree about the burn that is immediately sluiced with cold running water.

Unquestionably, the unsolved problem in burns is the control of infection. Not only do many patients die because of invasive infection and septicemia, as already mentioned, but local infection also has devastating consequences. The control of infection in the presence of dead tissue and in the absence of circulation is an old riddle.

Because antibiotics, antibodies and leukocytes cannot arrive into the dead tissue, physical factors controllable by the physician assume an important role. In dying arteriosclerotic extremities, dry gangrene is generally free of infection, while wet gangrene tends to be infected. Dryness, coolness and light successfully provide a prophylaxis against infection where antibiotics have failed. The open or exposure treatment of burns endeavors to produce a dry gangrene of the burned tissues. Both clinical experience and animal experimentation have shown that healing is more rapid and infection less common in suitable burns treated by the exposure method than in burns treated with closed dressings. Please note, however, the reservation in the phrase, suitable burns. It is difficult to prevent cracking of the eschar about burned joints. If infection develops and dissects beneath the eschar, the eschar is transformed from a protective armor to an undrained

Presented at the Michigan Clinical Institute, in Detroit, Michigan, March, 1956.

pus bag. Circumferential burns of the trunk generally become macerated, however frequently the patients are turned. We have tried Farmer's suggestion of applying aluminum powder to the bed clothes and to the burn. This behaves as a solid lubricant, like graphite, and prevents the patient from sticking to the sheets; however, it does not do a great deal to aid drying of weight-bearing surfaces.

Since full thickness burns are healed only after they are grafted, and can be grafted only after they have been debrided, it is important to discuss debriding and grafting techniques. A crowning contribution of the exposure management of burns has been a facilitation of surgical debridement. Twelve days after the burn, there is a sharp line of demarcation between the dry leathery eschar and the living tissue beneath. The eschar is not associated with the intense inflammatory reaction and granulation tissue that are found beneath closed, vaseline-dressed burns; unless the underlying fat is also burned and liquefied, this reaction grips the dead skin and makes debridement arduous and more bloody. Precise scalpel dissection in the plane immediately beneath the eschar is satisfactory, although tedious. A new, flashy method is to employ the electric dermatome, set to cut at an appropriate depth. This is suitable only on broad even surfaces with an underlying fat pad to protect fascia and tendons. Its advantages are speed, reduced blood loss and a machine-tooled smoothness of the exposed surface.

The only comment appropriate to the subject of chemical and enzymatic debridement is that at the present time they have little to offer. Active enzymes are available; the difficulties lie in cost and in techniques that will continuously deliver active enzyme to large areas of interface between dead and living tissue. Our own experience has been limited to a retrial of acid debridement.

On the subject of grafting, it may be said that both surgeons and skin show an almost infinite adaptibility; the result is that there are a very large number of successful grafting techniques. If granulation tissue is firm and bright red, it is not necessary to pare it before grafting. If one does decide to pare it down to its yellow-white base, however, better methods than scraping are available. The electric dermatome, set to cut at ten-thousandths of an inch, and advanced extremely slowly, performs this task magnificently also. A surface as smooth as polished marble results. An old-fashioned straight razor is also useful. Assuming healthy granulation tissue free from serious infection, there are two major enemies to the take of skin grafts—hematoma and movement. With co-operative or immobile patients, we have found that it seems easier to protect the grafts from shearing stresses by the expedient of allowing nothing to touch them than it is to dress them with a perfectly immobilizing bandage. The completely open management of grafts also has a special advantage; one can care for the grafts several times a day if it is indicated. Hematomas may be evacuated so that the grafts re-establish contact with living tissue. Infected pockets beneath the graft may be opened, thus preventing dissection of pus beneath the surrounding graft. A diffuse infection of the entire graft can be immediately diagnosed, so that antibiotic soaks may be instituted.

Dr. James Barrett Brown in recent years has emphasized the importance of applying homografts to extensively burned patients until such time as their grafting may be completed from their own donor sites. He has made two additional points: first, that satisfactory viable skin may be removed from refrigerated cadavers for twenty-four hours post mortem; second, that this skin may be readily stored in nutrient media in the refrigerator for three months. Thus, any hospital in which patients die and which is equipped with a refrigerator, may have a skin bank, if it so desires. Although homografts generally persist only three to six weeks, repeated sets may be applied. They may be laid on as narrow zebra stripes alternating with stripes of the patient's own grafts, which will grow out as the homografts resorb.

I should like to comment briefly upon hormone therapy and upon food. Hydrocortisone applied locally to experimental burns has been shown to increase the amount of necrosis. Administered systemically, it has the advantage of slightly prolonging the survival of homografts; its disadvantages lie in electrolyte and protein disturbances and in greater susceptibility to infection and to gastrointestinal bleeding. We rarely employ the drug. The growth or somatotrophic hormone may, in the future, prove important. Studies to date indicate that it is helpful to the patient's nitrogen balance if the diet contains large amounts of protein; its effects are reversed when the protein intake is small. The relation

of the burned patient to his food is of considerable interest. Moyer has shown that rats on a protein-free diet close their burn wounds as rapidly as rats receiving a high protein diet. This study demonstrates the aggressiveness of an area of injury in the breadline for available amino acids, and it is entirely comparable to the salamander who can replace an amputated limb while deprived of food of any kind. However, it is not intended to prove that the patient as a whole does well without protein! During the first week after an extensive burn, gastrointestinal upsets are the rule, and we make no particular effort to provide an adequate diet; thereafter, however, we work at it earnestly. Generally, we employ the method devised by Dr. James Barron at the Henry Ford Hospital—the continuous pumping of a homogenate of an enriched hospital diet through a small nasogastric tube.

One of the difficult problems in managing severely burned patients is in setting the proper pace. Operative procedures that are few and far between may allow infection and malnutrition to get far ahead. On the other hand, early, extensive, and closely-spaced surgery may kill the patient.

Where do our hopes for improved results in burn care lie? First, in mitigating the destructiveness of burn injuries—perhaps by heparin, cold applications or parenteral trypsin. Second, in controlling infection more successfully—perhaps by closed techniques that also dry the slough, perhaps by supporting the patient's resistance to invasive infection by the administration of nonspecific bacterial antibody such as properdin. Third, in influencing the immune reaction that brings about the rejection of homografts, so that they may persist longer or indefinitely.

In all three of these categories some progress is now underway. In the meantime, it may be worthwhile in considering materials that may be applied to burned surfaces to recall Dr. Brown's statement, that the best grease is elbow grease. Even mediocre care of extensively burned patients calls for an extraordinary outlay of man-hours.

ANESTHETIC MANAGEMENT

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Management of Injuries to the Genito-urinary Tract Associated with Pelvic Trauma

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TO those of us interested in statistics it is apparent that highway morbidity and mortality figures for the past ten years make similar advances in the stock market pale by comparison. The magnitude of the problem faced by the hospital and physician responsible for the care of the acutely injured patient is proportionate to these statistics. Interestingly enough, it is not a problem confined to the metropolitan area alone—it exists wherever a road and an irresponsible or incompetent driver combine to form a unit of hazard of undetermined potential. The wailing ambulance may indiscriminately deposit the victims at the office door of the country practitioner, at the ambulance entrance of the village dispensary, or in the emergency room of the busy city hospital, whichever may be most convenient at the time. In effect, this makes every physician a potential traumatic surgeon.

It is impractical, of course, to consider every doctor, irrespective of training and experience, as qualified to deal with all aspects of trauma. It is not too much to expect, however, that he be familiar with routine methods of care and investigation of the acutely injured patient. This expectation is not simply a reflection of an alarming increase in traumatic work on a local level, but is born of a vital need for such knowledge on a national scale.

While it is agreed that the generalist has a preliminary responsibility in the care of the injured patient, and this responsibility may consist of such life-saving measures as correction of shock and maintenance of hemostasis, as well as subsequent investigation of the degree of damage by physical and roentgenographic survey, the specialist also has a responsibility, namely, to keep in mind that the confines of his interest do not necessarily limit the extent of the patient's damage. The individual with an open fracture of the femur and a crushed pelvis may also have an extensive laceration of the bladder. Likewise, extensive contusion of the kidney may accompany a ruptured spleen or liver.

With these facts in mind, a discussion of specific injury of the lower urinary tract therefore must include the patient as a whole.

The genitourinary apparatus and lower urinary tract are especially prone to injury; the former by reason of its exposed situation anatomically in the male, and the latter by reason of its peculiar method of fixation, i.e., a vesical neck and prostatic urethra firmly fixed to the membranous urethra at the urogenital diaphragm with an expanding fluid-filled bladder sitting relatively unsupported above. The urethra and cavernous tissues, by contrast, are firmly secured in a tight fascial envelope called Buck's fascia. An additional fascial barrier has similar origin at the U-G diaphragm, but extends into the scrotum as Colles' fascia and on around the penis up onto the abdominal wall, where it is continuous with the fascia of Scarpa.

It is helpful to divide consideration of trauma, using the fixed barrier of the U-G diaphragm as the point of reference into sub-diaphragmatic and supradiaphragmatic injury.

If the injury is largely external and the barrier offered by Buck's fascia is not broken, the extravasation of blood and urine which ensues will be limited and will appear as a fusiform swelling of the shaft of the penis; while, if the injury is more extensive, the continuity of Buck's fascia may be lost. Escaping blood and urine will then be limited by Colles' fascia only, permitting extravasation to the scrotum and up onto the anterior abdominal wall.

In a case where traumatic extravasation involves both penis and scrotum, indicating rupture of Buck's fascia and extension of the escaping fluid to the barrier offered by Colles fascia, the therapeutic measures immediately indicated are: (1) deviation of the urinary stream by suprapubic cystotomy, (2) incision and drainage of the sites of extravasation, and (3) debridement of the periurethral tissues and reconstitution of

Presented at the Michigan Clinical Institute, Detroit, March 7, 1956.

urethral continuity by suture, or in extensive laceration by an indwelling splinting urethral catheter.

Tissues tolerate extravasated blood and urine poorly, even if uninfected. Healing takes place by extensive inflammatory reaction with scar, urethral stricture, and urethro-cutaneous fistulae. An untreated patient may develop massive lymphedema and chronic purulent tissue response. On lifting the penis, numerous urethro-cutaneous fistulae are often seen. Injuries of this type rarely escape notice, even though they may not be properly treated at first.

The second category of trauma by contrast, is not so evident, for here injury is supra-diaphragmatic, out of sight and, unfortunately often out of mind. The patient with these injuries is usually brought into the busy emergency room on Saturday night, in shock, with multiple extremity fractures, a chest wound or other distracting factors. He deserves and gets quick attention, but unfortunately his survey is often one-sided. His shock is treated, x-rays of his fractures are made, and he is then quickly taken to the operating room for the skilled attention of the orthopedist. As a rule, no one inquires as to the patient's ability to void and, if this function is not impaired, whether hematuria is present. No one does a rectal examination to see if there is a large bulging pararectal hematoma. Yet, failure to do this may cost the patient his life. I have seen a patient literally bleed to death into his pelvic cavity while his physicians were busily engaged in the problem offered by extremity fractures.

Rupture of the membrano-prostatic urethra is a very common and very serious accompaniment of forceful injury. The large vascular plexuses torn free by this injury quickly fill the pelvis with blood, the bladder lifts free of its attachment, and urine empties into the same space. To suspect its presence is to solve more than half the diagnostic problem, for a simple investigative technique, the urethrocystogram, will supply the needed additional information. This should be done as early as possible in the course of initial survey, preferably while the patient is still in the emergency room undergoing x-ray studies.

Under clean conditions a catheter is passed into the urethra and a 12.5 per cent solution of sodium iodide is allowed to run in. X-rays made during the act of filling may show the characteristic extravesical filling and superior displacement of the bladder, or the classical tear-drop deformity of the bladder created by the enlarging lateral hematomata.

Treatment involves immediate surgical exposure suprapubically, removal of all extravasated blood and urine, control of hemorrhage and reestablishment of urethral continuity.

Hemostasis and approximation of the torn ends of the urethra are accomplished by the two catheter technique. A Foley urethral catheter is passed by an assistant to, and then through, the membranous urethra and grasped with a forceps from above. A second catheter is passed via the cystotomy through the vesical neck, and the ends are sutured temporarily together. The upper catheter is then pulled back into the bladder drawing the Foley catheter into the opened viscus. The Foley bag is then inflated and by gentle traction the prostatic and membranous urethral ends are approximated. This accomplishes hemostasis and permits a satisfactory union. Suprapubic cystotomy should be done and maintained along with the urethral splinting catheter for two weeks. Failure to accomplish union early in the course of injury will result in an impassible and impossible stricture.

Pelvic injury also commonly involves loss of vesical integrity either by spontaneous rupture—or more often, by laceration from a moving fragment of bone. The hemorrhage and extravasation which ensues are often silent for some time, but should be suspected in all cases where pelvic fracture is present, especially where hematuria is an initial complaint. There is no substitute for a urethrocystogram performed as soon as x-ray survey is permissible.

The physician may permit himself to be misled by assuming that a pelvic fracture could not produce injury because there is no displacement of bone. A cystogram may show the obvious extravasation on bladder filling and emphasize the fact that what is seen on preliminary x-ray may not have been the situation at the time of injury, for the fractured pubic ramus may quickly slip back into relative alignment. Displacement of bone may be readily apparent and suggest the possibility of vesical laceration, which can be proved by urethro-cystogram. Sometimes the laceration is more extensive and may involve injury at the dome or lateral walls of the bladder with intraperitoneal extravasation.

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Development of the Well-adjusted Child

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SO MUCH has been written in the past ten years concerning the emotionally disturbed child, or the child with a problem, that a consideration of the factors that go into making a psychologically healthy child is in order. Much tension has been aroused in otherwise fairly well-adjusted parents by the anxieties of individuals, both lay and medical, who are interested in developing mental health programs in their respective communities. While this is not the intent of their program, guilt feelings on the part of parents are inevitable.

It is, therefore, the purpose of this paper to provide a discussion of the essential ingredients that help toward making a normal social and emotional adjustment for the developing child.

Becoming an emotionally healthy adult is a process of gradual maturation. The ability to assume responsibilities that face every grown-up individual does not suddenly occur when voting age is achieved, but rather is a situation of slow adjustment to the conflicts and rebellions that begin at birth and continue through life. Much of the end result depends upon the ground work and preparation laid in infancy and early childhood. Thus the rôle of the parent becomes of prime importance.

What, then, is necessary to provide for the development of well-adjusted, reasonably efficient and happy children? What are the qualities and attitudes that parents must foster in order to provide for an atmosphere in which children may flourish? What must they know about their children to provide them with this wholesome environment?

Basically, every child needs the affection of both its parents. The infant definitely needs the tender care of the mother, and a sense that father stands with her in providing emotional support. The comforting bodily contacts of the nursing infant with the mother, her prompt response to satisfy his needs and wants, and later the loving solicitude of both parents help give the child a feeling of security and well-being.

It may be said that the first step in the healthy emotional development of the child is the capacity of the parents to give love, and in return that the child himself senses this love. During this early period, the child is completely dependent on them for his safety and comfort, and he should be aware that his parents are available in time of need. Therefore, if his dependency upon them is satisfactorily fulfilled, he will be comfortable and friendly; if it is not adequately met, he becomes tense and anxious. Parental affection is then the foundation upon which the child's feeling of security in life is built.

The emotional tie which is established with his parents in childhood greatly determines the individual's relationship with people in later life. It is from experiencing sympathy, understanding, patience, fairness, and encouragement of a wise parental love that the child is given a foundation for his later social attitudes. When the parent-child relationship is sound and wholesome, mistakes in the child's management are not likely to result in any serious or permanent harm to him.

Parents must provide an assurance of the stability of the home, for the child needs the protection of a firmly rooted environment. He needs confidence in their judgment. He should know that they will not make demands on him which he cannot meet. He must feel that they want him, and love him whatever his faults or shortcomings. His home must be a dependable refuge where he can return after his excursions into the outside world. There he can find understanding and counsel, and above all, emotional support, so that he can go forth again confidently to look for further experiences.

When a child learns by day-to-day contact with his parents that adults are tolerant and accepting people, even though at times they impose some restrictions, he will turn to new contacts with other adults and other children with a confidence that could only be the result of earlier experience. If a child is convinced that his parents are friendly and reliable people, then he himself inevitably adopts their attitudes. The child who feels reaonably secure in his parents faces his problems

with straightforwardness and self confidence. He is curious. He displays a desire for new experiences, a striving for self-enrichment and a pleasure in accomplishment. To him, the world is intriguing and challenging.

Acceptance of the individuality of each child is another basic need. Comparisons of one child with another is a common experience, and when a parent cannot accept the limitations of his offspring, problems frequently result. It is quite natural for them to want to create a child of whom they can be proud. But they must not apply too strict standards in the training of the child. How much better it is for children, when parents accept them as they really are, correctly evaluate their assets and liabilities, devise opportunities for them to make the most of what they have, allow them to develop at their own rate, and let them participate as well as they are able in the plans for their own activities and their own futures.

Parents can give children feelings of self respect and self esteem. They strive actively for these feelings. Confidence is built up within children by two types of experience: (1) the satisfaction which comes from achievement, and (2) the pleasure which results from the recognition of these achievements. Children must learn to sense their own worth. Anything which tends to make them feel unworthy or inferior is likely to evoke promptly some kind of defensive reaction. If children are unsure of themselves as persons in their own right, they may withdraw from social relationship in order to maintain their own sense of security by avoiding the hazards of group participation.

Recognition and approval for desirable behavior by parents have a great constructive value in child training. The attitudes which adults display toward a child's efforts are the chief means by which he can evaluate his own capacity and ability. It also determines the degree of satisfaction which he experiences in adopting a more adult type of behavior. When parents display interest in the child's activities and pleasure in his accomplishments, even routine tasks which he would otherwise consider as drudgery become not only tolerable but a matter of pride. Foundations for the later feelings of responsibility are thus laid.

A goal for parental management, then, is for each child to become an adult who can live happily and effectively in a competitive world. To accomplish this, the child must be nurtured and protected until he is capable of handling situations for himself. Protection, of course, can be overdone or unduly prolonged, and the overly protected child may reach adult life unprepared to face the uncertainties and hazards which all adults must accept.

Properly timed, a feeling of insecurity may be character building. The value of such insecurity, however, depends on proper dosage; too much may defeat the purpose and result in unhappiness, and possible breakdown, and leave the child to enter adult life without confidence and faith in himself.

Parents must recognize a child's need for increasing independence. The infant, of course, is totally dependent upon his parents. However, every parent must realize that the day will come when their helpless child must become an emotionally mature adult who can stand on his own feet and win for himself a place in the professional, economic, and social world.

The ability to assume this responsibility is not a sudden acquisition. Rather, it is the result of a process of growth, training and experience throughout childhood. In late infancy, the need for independence becomes evident when the child discovers that he has a will of his own. He then enjoys exercising it by making his own decisions, participating in plans for himself, and resisting plans which are imposed upon him.

Parents certainly may impose demands upon their children but at the same time be generous in allowing them to make less important decisions. Most children accept reasonable restrictions provided they have the repeated reassuring experience of having their own needs considered when major decisions are not at stake. However, it is important that children not be forced to assume responsibilities until they have the capacity to do so.

Children are as aware as adults that they do not have the ability to judge values in an adult world. They become frightened and confused if the occasion arises where they are required to form judgments in matters beyond their abilities, but they gain a sense of confidence if they can be free to make decisions in matters in their own sphere of action.

Proper credit for adaptability is not often given to children by their parents. The responsibilities the growing boy or girl assumes are generally taken for granted. If the demands made of them are excessive they become, if not problem chil-

dren, then at least children with problems. They react vigorously to unreasonable demands by becoming irritable, defiant, and tearful. There then develops antagonisms and hostilities which could have well been avoided by understanding and patience.

In the home, the child needs a pattern within which he can organize his developing powers and capacities. Harmonious and constructive home life is hardly possible without some authority and order. When there is no authority in the home, or when authority is divided or inconsistent, chaos in home living results. The child becomes confused, feels insecure, and may acquire disrespect for all authority. This attitude may later interfere with his school and community adjustment. Children who have not learned the meaning of authority in the home frequently have great trouble in school.

Authority alone, however, is not enough to keep order. Authority may be ineffective and harmful if it is not understanding, reasonable and just. Without a background of affection, trust and mutual respect, authority deteriorates into pure tyranny. In the home, then, the child needs to learn that certain things are not done.

In every home, there are times and situations when parental firmness is necessary to limit behavior. Most parents realize that it is natural for children to test out the limitations in every new situation. Children need to know what acts will be permitted and what will happen if they do what is forbidden. It is, therefore, necessary for parents to determine where they must draw a line for each individual child. Once having taken a stand, they hold firm and allow the child to learn by unpleasant experience that he has crossed that line. Thus, in these lessons of daily living, the child learns to bring his desires and aspirations into harmony with his family and the larger community.

Summary

The mature individual represents an accumulation of many experiences. Stresses and strains from which he had been protected as a child have slowly brought increasing pressure upon him as he ages. The manner in which his parents handled these conflicts, and their reactions to them, largely determine his basic personality. If they have given him strength and confidence, he will resolve his problems in a satisfactory manner; if they have not given him these qualities, he may resort to many neurotic artifices during his lifetime.

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ACCIDENT PRONENESS

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Changing Flora in This Antibiotic Age

By Grayson Carroll, M.D.
St. Louis, Missouri

IN 1896, a gentleman described the colon bacillus and ascribed to it the cause of all urinary infections. This became so commonly accepted that the organism was given his name. For some forty years, urinary infections and Escherichia coli were synonymous. This error was not an important one clinically, so long as we had only urotropin as a drug to combat it.

In 1940, the treatment of urinary infection was greatly stimulated by the introduction of the sulfonamides, chemotherapeutic agent.

The thought concerning urinary infection was revolutionized, however, with the introduction of the antibiotics. Although some infections were dramatically cured, others were not, and it soon became apparent that no one antibiotic was effective for all types, or even all strains, of the organism found in the urinary tract.

A certain pattern began to form; first, that penicillin inhibited the coccal infections and streptomycin the bacillary infections, so it became necessary to know which was present in order to apply the proper drug. When streptomycin began to lose its potency, other antibiotics were discovered.

The Tetracyclines

The tetracyclines* as a group were found to be effective against the (1) Escherichia coli, (2) Aerobacter aerogenes, (3) Paracolon, (4) Alcaligenes, but totally ineffective against (1) the Proteus, (2) the Pseudomonas, and (3) the Streptococcus fecalis (Enterococcus).

Chloramphenicol (chloromycetin) was found to be most effective against the Proteus, but on the other hand not good in Aerogenes and Paracolon.

This selectivity made it necessary to revise our thought about most urinary infections being caused by Escherichia coli only. About nine organisms are commonly encountered in urinary infections.

We now realize that we are faced with the treatment of an organism and not so much a disease.

Another law began to work in this antibiotic age to prolong and make more difficult the battle between the complex organism (man) and the simple organism; that is, "the ability of an organism to adapt itself to its environment." Even in those instances where the organisms were killed, the more resistant type has taken its place.

We now have a preponderance of resistant staphylococci, and an increase in the frequency of the resistant bacilli; namely, the Proteus and Pseudomonas. Therefore, I shall confine my remarks to these three organisms. Each has certain behavior patterns whereby the clinician can ofttime recognize the organism he is combatting before any culture report is available.

The Micrococcus

Forty per cent of acute pyelonephritis, especially in children, is caused by the staphylococcus. It is usually blood-borne and predominantly from respiratory infections. The acute unilateral pain and tenderness over the kidney with chills and fever, with or without pus in the urine, can be treated as a staphylococcus infection involving the cortical portion of the kidney.

If the same clinical picture is present, but the psoas shadow is obliterated on the KUB x-ray, a perinephritic abscess of staphylococcus origin may be suspected, since 90 per cent of perirenal abscesses are due to the staphylococcus. Skin infections, boils, and respiratory infections often precede perinephritic abscesses.

A persistent alkaline urine with infection which does not become acid by ammonium chloride medication and acid diet is either a staphylococcus infection or a proteus. A simple microscopic observation of the stained or unstained smear will distinguish between a coccus and bacillus. Treatment can be instituted against one or the other immediately before the cultural differentiation is

Presented at the Michigan Clinical Institute, Detroit, March 9, 10, 11, 1955.

*Tetracycline (Achromycin), Chlortetracycline (Aureomycin), Oxytetracycline (Terramycin).

available. Stones with infections, encrustations of the bladder, or indwelling catheters are usually the proteus or the staphylococcus.

Fifty per cent of the staphylococci split urea in the urine to form alkaline urine and 100 per cent of proteus bacilli do the same. Rarely does the Aerobacter aerogenes, Paracolon, E. coli or streptococci do so.

Since respiratory infections are more common in the winter, one may expect to encounter coccal infections in the winter more often.

Streptococcus Fecalis (enterococcus)

The Streptococcus hemolyticus and Streptococcus fecalis are found in the urinary tract. May L. Porch examined 100 strains of streptococcus isolated from urine in children and found 70 were Streptococcus fecalis. This organism comes from the intestinal tract and not from the respiratory infections. It is exceedingly more difficult to treat, resisting most of the antibiotics and chemotherapeutic agents, and most successfully treated with mandelamine, 2.5 gm. tablets four times a day.

The Streptococcus hemolyticus coming usually from a sore throat is best treated with Ilotycin, 2 tablets four times a day, probably combined with streptomycin, 1 gm. injected intramuscularly every other day.

Treatment of the Coccal Urinary Infections Considering the Changing Flora

Ninety-six per cent of gonococcal infections were killed with the sulfonamides when first introduced. Only 16 per cent were controlled by the sulfa drug after two years' use of it. To date, penicillin is 96 per cent effective in gonococcal infections. Penicillin-resistant gonococci are rarely seen. Ninety-six per cent of staphylococcal infections were controlled by penicillin when first introduced, but now only 6 per cent are inhibited in those encountered in St. John's Hospital in St. Louis, and only 26 per cent in the Massachusetts General Hospital in Boston. Reports from other sources coincide with these figures.

The staphylococci which are capable of developing a penicillinase have survived. According to a survey made by K. Riley, two-thirds of the population has had penicillin therapy. This widespread use has decreased its effectiveness, especially in medical centers.

Because of this high percentage of resistant organisms and the side reactions, many of which are very serious, penicillin should be given only in selected patients and not prophylactically or routinely any more.

Erythromycin or terramycin should be the drug of choice, although in areas where these have been used for three or four months, cocci resistant to them are developing.

The administration of streptomycin with erythromycin apparently helps prevent the development of resistant strains, according to Mantel.

Many new antibiotics were reported at the annual meeting on antibiotics in Washington, D. C., but none of these will kill the penicillin-erythromycin-resistant cocci.

Proteus

The proteus may be suspected in any persistent urinary infection which fails to respond to tetracycline therapy or has a persistent alkaline urine.

The clogging up of indwelling catheters from "sandy" urine in these catheters is due to the proteus. Recurrent calcium stones are the result of proteus infection or staphylococcus also.

Treatment for Proteus Infections

Chloromycetin, gantrisin, and furadantin are the drugs to use when proteus is suspected. We are all familiar with the action of gantrisin and chloromycetin, but since furadantin is a newer drug, a few remarks may be made about it. We made a critical study of furadantin; it is nontoxic in required doses; it is excreted in high concentration in the urine. Our blood level determinations indicate that, though low, they are adequate to be clinically worthwhile. An initial dose of 200 mg. followed by 100 mg. four times daily, giving a booster double dose from time to time is recommended. It is the drug of choice, if tolerated, with patients with indwelling catheters, neurogenic bladders, cystoceles, et cetera. With persistent encrustations, Suby's solution should be used as a continuous or intermittent drainage.

The Pseudomonas

This is the most resistant bacillus we have and most of the strains are not inhibited by any of our drugs. Of eighty pseudomonas organisms isolated, only five were sensitive to terramycin and only two sensitive to streptomycin. Yet the combination of streptomycin and terramycin controlled clinically sixty-seven out of eighty (84 per cent).

(Turn to Page 959)

Clinical

For practical purposes, I think of infections as (1) acute, (2) persistent and (3) recurrent.

The *acute* infection may be treated expectantly; that is, with any drug of preference and a high percentage of the patients will be relieved without any further investigation.

The *persistent* infections are those that continue despite the administration of the drug. This indicates that the drug chosen would not inhibit the infecting organism, thus calling for the identification of the infecting organism.

The *recurrent* infection is the type that clears up under antibiotic medication indicating that the drug used inhibited the micro-organism present, however, after a period, the patient returns with a recurrence of the infection.

This means that although one is using the right drug, there is still a pathological lesion which brought about the recurrence. Obviously, a careful investigation must be now undertaken which includes many maneuvers, including a complete cystoscopic examination with x-rays.

The most common cause of recurrent infection is obstruction somewhere in the urinary tract, retarding the flow of urine and giving bacteria ample time to multiply. When these pathological lesions are discovered, they should be thoroughly treated to prevent the destruction ultimately of such a vital organ as the kidney.

Urethritis in Children

The most common cause of urinary infection in children, especially female, is urethritis, and the most common source is a complicating vaginitis. A reddened area about the vagina and urethral meatus, with a thin watery discharge, is seen. Although the organism can be many different types, the proteus or pseudomonas from the fecal contamination is the most common. The treatment is dilations of the urethra in these small girls with a No. 10 sound, gradually dilating to a No. 20. Furadantin suppositories, broken in half, should be inserted daily, if possible, in the urethra and also in the vagina. Local antibiotic ointments ofttimes cause increased irritation.

The resistant type of urethrovaginitis is often controlled by a suppository of 1/10 mg. of diethylstilbestrol inserted at bedtime by the mother, every other day for two weeks. The alkaline nature of the vagina encourages growth of organisms, and the stilbestrol changes the pH from 78 to 55. The dilation of the urethra in these chronic infections is tedious but important.

Urethritis in small boys needs a meatotomy which can be done in the office.

Pyelitis of Pregnancy

Since this condition is caused by dilatation and atonic condition of the ureter, furadantin, which is secreted in large amounts and retained in urine, is very helpful, if tolerated.

The identification of the organism in so-called pyelitis of pregnancy is very important from the start, and in this type of infection the "hit-and-miss" therapy is to be condemned.

An indwelling urethral catheter is to be avoided, if possible, but ofttimes is the only method of drainage available and will avert disaster.

Indwelling Catheters and Nephrostomy Tubes

If possible, the indwelling catheters should be hooked up to a closed circuit draining into a bottle at the side of the bed which has been boiled. The catheters should be changed every week or two. The medication should be continuous on small doses of either gantrisin or furadantin. We have patients who have taken these drugs for three months continuously without ill effects and prevented the growth of proteus which causes concretions.

539 N. Grand Blvd.
St. Louis 3, Missouri

Bony metastases of renal cancer are most often osteolytic in character.

* * *

Bony metastases from prostatic cancer are osteoblastic in type.

* * *

The prognosis in most cases of renal cancer is determined by the steps taken by patient and physician when blood is first noticed in the urine.

The biopsy report, interpreted in terms of clinical findings, is the single, most decisive evidence upon which prognosis and therapy of cancer will be based.

* * *

Innumerable experiments and decades of clinical experience have shown that when biopsy is properly done there is little or no danger of spreading the disease.

Human Relations in the Medical Profession

By Carl E. Schneider
Detroit, Michigan

YOU do me a great honor in inviting me here to speak before you. Frankly, I am filled with awe in the presence of so much learning and so much skill. My normal contact with the medical profession is on an individual basis of doctor and patient with an occasional consultant or two to prove the doctor's contention that I am a hypochondriac. I come here with the viewpoint of a man whose job is human relations and who has never looked on the doctor except through the eyes of a patient. It is this viewpoint that I hope to impart as I offer a few thoughts on the human relations aspect of the medical profession.

I realize that much is being done in this hospital and in others to make all staff members—doctors, nurses, attendants, everyone—aware of the importance of human relations. This is a never-ending job, to which the management of a hospital must devote its most careful attention. At the same time, it requires the whole-hearted support of the medical profession.

The reason is that so much in the hospital hinges on human relations. The patient is being treated in a place that is strange to him. He is perhaps frightened and he is ill. Merely an unkind word or action on the part of anyone connected with the hospital could produce an unfavorable reaction. Errors in human relations can harm a hospital's reputation and to some extent undermine confidence in the medical profession.

Since this is so, every member of the medical profession has a high stake in the hospital's good human relations. It is to his interest to promote them in any way he can, and there are certain things he can do in this direction. True, he does not determine the selection of people and their first training, both of which are important in obtaining proper attitudes with regard to conduct, courtesy, duties and responsibilities. But these people's continuing, day-to-day guidance and approach to their duties depend to a large extent on the doctor.

In industry we have found that the attitude of management—whether displayed by a foreman, department head or top executive—pretty much sets the attitude of all the workers. As we are considerate and courteous, so are they. As we subject ourselves to discipline and accept our responsibilities, so do they. If by our friendly recognition of their work we make them feel that they are members of a team, they take greater pride in what they do—and do it better.

I don't mean by this that there is no discipline. Discipline is essential to any well-run business or institution. But it does not rule out a friendly atmosphere. Discipline to me means respect, acceptance of responsibility, proper conduct, courtesy, integrity and pride. I find nothing repugnant in these attributes. Proper discipline develops a strong and efficient team capable of meeting any emergency. It does not apply only to certain members of the staff; it must permeate the entire organization. It is a necessary ingredient in a good human relations atmosphere.

In any organization each member is entitled to and should feel a sense of accomplishment. He should have a feeling of belonging, of being a member of the team—a feeling of contributing to the over-all purpose of the institution. We all have a craving for recognition, no matter on what level we may work. And the leaders of the organization, in particular, have to be especially careful to give that recognition to each individual and to his work. More friendliness, more co-operation is required of them than of anyone else. When they do create a friendly atmosphere, every single worker can take pride in all the accomplishments of his organization and give his best to it.

Since the doctor does much of his work in the hospital, I have devoted some time to discussing before you some human relations factors you might wish to consider on the institutional level.

Presented before graduating senior residents, and medical staff, Harper Hospital, Detroit, Michigan, June 14, 1956.

Mr. Schneider is vice president and director of industrial relations, Burroughs Corporation. Also, he is president of the Board of the Rehabilitation Institute of Metropolitan Detroit, Inc.

However, that is only one side of the picture. The other side is the one that is exposed to people like me, the patients. Here I speak, not as a professional, but as a lay observer. And I am going to try with some trepidation to describe what we patients expect of our doctors.

The point that strikes us most forcibly about the medical profession is the dominating importance of personal responsibility. To laymen the doctor's responsibility appears so awesome that we are almost inclined to consider members of the medical profession as above the normal human frailties. More than most of us, they seem to have a never-ending obligation to study and learn better ways of helping their fellow men.

Such responsibility can only be met by hard work personally undertaken. There is a danger that confronts anyone who has had long institutional training. When he completes that training, the safeguards surrounding him are removed. His routine is changed; his supervision disappears. More play is given to his individual initiative, but conversely more initiative is required. Certain matters of more or less institutional responsibility now become, directly and totally, his personal responsibility. His obligation entails extra effort, the giving of his talents over and beyond the day-to-day requirements. It is up to him to foster within himself the constant urge and drive to improve in his profession.

It's true of every person who has a job that he must work to improve his ability. But the medical profession has the obligation to a unique degree. Most of us are dealing in products and services. If we fail to improve, our lack of effort would usually mean only dollars lost. The medical man, however, is dealing in the health and lives of other human beings. Hence he must be always ready to work at the top of his ability. And his ability is determined by the personal contribution he makes by way of study and work.

In industry we have for years been searching for training courses, tests and other educational devices to further the success of our people. Management development programs have been set up on a grand scale. Yet we always come back to one fact. If the man isn't interested enough in his own success to put forth extra effort and work, we are wasting time and money on these programs.

The doctor's reward for his effort must be satisfying in a way that we laymen can only guess at. I am sure that the skilled surgeon who successfully performs a delicate operation deeply appreciates the extra hours and hard work that have made him expert in his profession. When the family physician struggles from his bed at 2 a.m., he is grumbling, grunting and grouchy. But when he returns two hours later, surely there must be a glow of accomplishment to reward him for relieving some one of severe pain or perhaps saving a life. That is success. It does not come suddenly, nor is it plucked from a tree. It is the meeting of two lines: one, opportunity; the other, preparations for responsibility. It is such extra giving that we patients have come to expect of doctors.

At the same time, we are inconsistent. While we expect the physician to be almost more than human in the performance of his duties, we still want him to be completely human. We want his complete personal interest in our case. We even want a certain amount of sympathy, or at least friendliness. We take it for granted that the doctor is trained to do his job correctly. But we want more; we want him to do the correct job with a human touch. He may be amused by our attitude or annoyed by it. He may think it is silly. But nevertheless—there it is. We ask that it be treated sympathetically. When we seek medical care, we are often frightened. We want the very best of care for those we love. We make difficult, perhaps unfair, demands because we are so aware of our own responsibilities. We are worried about ourselves and our families. Our emotions and our imaginations are involved as well as our flesh and blood and bones. The doctor cannot put a splint around our spirit, but he can by his friendliness give it a bracing tonic.

Man is not two people—one who lives, loves and walks free under the sun; the other who is wheeled into the hospital without emotion or the need of a friendly hand or cheerful word. The cadaver in medical school was a lifeless, soulless thing. The patient is a living human being with a soul, who looks hopefully to the doctor for more than his skill.

Right or wrong, that is our attitude and it is what doctors have to deal with. Have we always felt that it was considered sufficiently? I am afraid that the answer has to be, not always. On occasion I have heard complaints made by people who had been in a hospital for an operation. Their complaints went something like this: There was too much regimentation. There was an unfriendly

atmosphere. Although they were satisfied with the skill of the surgeon, they somehow felt that they were just another piece of bone and flesh rolled in to the operating room. The staff was too coldly professional. One man even commented that a doctor's internship should include his own submission to a major operation so that he could understand the patient's feelings. Whatever you may think of these complaints, they do indicate that these people experienced a lack of human relations atmosphere in the hospital.

Now I know that doctors cannot control the conduct of all the people connected with the hospital. However, I also know that doctors can greatly influence the whole staff by the example they set. Understandably, the doctor cannot allow himself to trip over his emotions by becoming overly sympathetic or too personal. Is there not, however, a medium position between chill competence and over emotional sympathy?

I bring up this point because for some reason some professional men almost cease to be human beings when they become a member of a profession. We have the problem in management circles of industry. Some have the feeling that professional men should be mentally and emotionally disciplined to the point that normal reactions and resentments are controlled; that, being professionals, they are not interested in recognition and need give none to others. Sometimes there creeps into professional groups a brusqueness of manner that chills the hearts of those with whom they deal. There develops an aloofness that is extremely difficult to penetrate or understand. Occasionally we meet the "two-hat man." Under one, he is the intelligent, cordial, friendly husband and father and respected member of the community. Under the other hat, he becomes the intelligent, successful, arctic cold professional.

Now, of course, it isn't true that the professional has no hunger for recognition, appreciation and understanding. But what is more to the point, other people are repelled and hurt by this frigid attitude. We, the patients, appreciate the doctor's skill and depend on it. We hope for more than just his skill to help us.

I have always been impressed by a code for living attributed to Stephen Grellet. He wrote: "I expect to pass through this world but once. Any good therefore that I can do, or any kindness that I can show any fellow creature, let me do it now. Let me not defer or neglect it, for I shall not pass this way again."

The whole life of a doctor is a carrying out of the letter of that code. His fullest potential for success in healing will be attained in carrying out the spirit of it as well.

Beyond his sense of responsibility and his human warmth, there is another quality that we laymen expect of a doctor. We expect a sense of dedication. What a heart-warming tribute it is to the whole profession of medicine that we have come to expect it! In the course of his internship, the young medical man or woman may have run into situations which somewhat dull this sense of dedication. It may seem rather naive to mention it. And yet you men and women surely have it. You would not have undergone all the sacrifices of the past years if you did not. Let it come to the fore. Let your calm and determined choice of the healing profession be renewed in your hearts—and keep it there always. Greater or less skill in different doctors is understandable. Greater or less intelligence is characteristic of doctors as it is of all men. There can be no greater or lesser degree of dedication to the calling of medicine.

As you continue your profession, your sense of dedication will be sorely tried. You can count on that. You will meet whinning patients and deadbeats and a lack of ordinary gratitude. You will be busy with a hundred tasks of office administration that have little to do with healing. You will be tempted, perhaps, to lose sight of the fact that yours is a dedicated life.

I don't think that I am presumptuous when I say that I speak here with the voice of hundreds and thousands of people. And what we are all saying is: "Don't lose that sense of dedication. Keep it strong with you. We need it. We need to think that your life is devoted to protecting us and those we love. We trust you with our babies, our husbands and wives, our own lives. We desperately need the confidence that comes from putting our health in your dedicated hands. We know that you will never fail us."

And now may I congratulate you men and women who have successfully passed through your period of training and are now about to embark on a noble career. I wish you every success. You enjoy an advantage in your work peculiar, I believe, to your profession alone. For almost every

(Continued on Page 972)

Symposium on Blood

Wayne State University College of Medicine

Saturday, January 21, 1956

FOREWORD

An annual Symposium on Blood is held at Wayne University College of Medicine each year on the third Saturday in January. It is a unique meeting of its kind which attempts to be as informal as possible and where outstanding work related to recent developments is discussed. Papers are presented by investigators from all parts of the nation and usually there are some from overseas. Emphasis is placed on material commonly referred to as fundamental research. In the evening after the symposium, many of the participants forgather at one of the famous local restaurants for dinner and getting acquainted.

PROBLEMS IN MEGAKARYOCYTOPOIESIS

By John W. Rebuck and Raymond W. Monto
The Henry Ford Hospital, Detroit, Michigan

The orderly delivery of platelets to the blood is dependent upon the integrity and normal functioning of the megakaryocytic series of cells in man. Normally the bulk of the megakaryocytes are found in the hematopoietic marrow. The youngest member of the megakaryocytic series is termed the megakaryoblast, which forms the promegakaryocyte, which in turn forms the megakaryocyte or platelet-forming cell. Ordinarily the megakaryoblast is derived from the myeloblast (hemacytoblast) or reticulum cell (mesenchymal cell). The cytoplasm of the megakaryocyte forms platelets either by breaking up of pseudopodial processes or by simultaneous disintegration of large portions of the entire cytoplasm. In pernicious anemia, thrombocytopenia is brought about by systemic disturbance of the megakaryocytes. Vitamin B_{12} deficiency leads to failure of nuclear maturation, excess multinucleation, failure of granule formation, and results in poor platelet formation. In idiopathic thrombocytopenic purpura in contrast, thrombocytopenia is present in the face of usually increased numbers of megakaryocytes. In the latter disease, antibodies effect peripheral vacuolation of megakaryocytic cytoplasm, disappearance of granulation and retardation or cessation of platelet formation. Extensive histochemical studies reveal a striking correlation between findings in platelets and megakaryocytic cytoplasm. Heat stroke brings about an almost specific injury of megakaryocytes among the blood-forming cells.

This is the fifth annual Symposium on Blood held at Wayne State University College of Medicine.

BIOCHEMICAL STUDIES ON LEUKOCYTES

By William N. Valentine and John S. Lawrence
University of California at Los Angeles, Los Angeles, California

Human leukocytes possess a complex biochemical constitution with metabolic patterns and enzymatic activities, which can be expected to vary with individual leukocyte types in health and with the altered environment resulting from disease. It is therefore of importance to characterize the biochemical machinery of normal leukocytes and the altered patterns engendered by intrinsic disease of hemopoietic tissues and by disease basically involving other body tissues. While of necessity much of such characterization must initially be descriptive, it can be hoped that ultimately data obtained may be useful in diagnosis and as a clue to possible avenues for therapy.

Leukocytes of all types consume oxygen, utilize glucose via the Embden-Myerhoff and other cycles and produce lactic acid. Granulocytic leukocytes contain glycogen while mononuclear cells possess little or any. The enzyme beta-glucuronidase and free glucuronic acid are present, again this activity being low in cell populations composed primarily of blast cells or mononuclear cells. Leukocytes also contain, among other investigated constituents, free glutathione, transaminase, acid and alkaline phosphatases, esterase, lipase and in the case of the basophil histamine.

In studies involving leukocyte respiration it has been found that the addition of chloromycetin to fortified homogenate systems results in significant reduction in O_2 consumption, although comparable levels of penicillin, aureomycin, and terramycin fail to exhibit this effect. Atabrine is a powerful inhibitor of leukocyte respiration in such systems, and respiration is not appreciably restored by additions of hydrogen acceptors, such as methylene blue. Cyanide inhibits but does not eliminate respiratory activity, the inhibition being counteracted by methylene blue. *In vitro* experiments indicate that sustained, undiminished respiratory activity is preserved for some reason much better with cyanide and methylene blue than with methylene blue alone. Alkaline phosphatase of leukocytes has been extensively studied. This activity is uniquely low in chronic myelocytic leukemia, high in a variety of leukemoid reactions and in myeloproliferative syndromes morphologically re-

sembling chronic granulocytic leukemia, and elevated *on a unit cell basis* in a wide variety of disease states where increased pituitary-adrenal activity is expected. Substantial elevations also occur when ACTH is administered over a seventy-two-hour-period in large doses to individuals with intact adrenals, but not in the presence of Addison's disease or complete adrenalectomy. Steroids of the cortisone type also evoke this response in either presence or absence of adrenal glands, except that the low values in chronic granulocytic leukemia are unaffected by either ACTH or cortisone-like steroids, a fact suggesting a failure of end organ response but not adrenal insufficiency. Alkaline phosphatase is capable of splitting off phosphorus from a wide variety of phosphomonoesters of physiologic importance, including adenosine-5-phosphate. Explanation of the multiple functions of this enzyme in leukocytes, as in other tissues, awaits better understanding of its role in metabolism. It should not be construed, however, that increased adrenal activity in "stress" is necessarily *the only mechanism* capable of producing the unusual elevations in activity observed.

APLASTIC ANEMIA: NATURAL HISTORY AND INCIDENCE IN MODERN THERAPY

By James A. Wolff, Hattie E. Alexander, Allyn B. Ley and Frances Rowe
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A careful review of the records of all cases of aplastic anemia meeting criteria for diagnosis established by the investigators has been made in fourteen large teaching hospitals in the Eastern United States. This study covered the period 1944-1954.

The clinical features and laboratory data of the disease have been analyzed. The duration, response to treatment and final outcome have also been evaluated. Special consideration has been given to the role of modern drugs, particularly antibiotics, as possible factors in the pathogenesis of the disease.

A total of 334 cases of aplastic anemia have been included in the study. Of these, sixteen met the criteria for diagnosis during the course of illness but were rediagnosed terminally or at post-mortem as leukemia or myelofibrosis. Of the total series, 66 per cent died, 7.7 per cent are still under treatment, 23 per cent were lost to follow-up, and 3.3 per cent recovered.

Therapy, including splenectomy, ACTH, and cortisone, failed to influence the course of illness. In over half the patients no antibiotic was administered in the period prior to the onset of symptoms. A number of different antibiotic agents had been administered in the remaining cases. In the year 1952 an increased incidence of aplastic anemia occurred, primarily due to cases associated with chloramphenicol administration. Because of other factors which might have influenced the incidence of cases at this time, and because of the relatively small number responsible for the increase, interpretation and statistical evaluation of this increase is not possible.

THE SLOW AND RAPID FREEZING OF BLOOD: THE MECHANISM OF CELL INJURY AND ITS PREVENTION

By Harold T. Meryman
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One of the most intriguing and important phenomena in the freezing of a cellular biologic medium is the formation, at slow rates of freezing, of exclusively extracellular ice crystals. Such crystals generally do not do mechanical damage, but merely withdraw water from both intra- and extra-cellular spaces, causing a passive collapse of the cell. Cell injury under such circumstances is not mechanical, but chemical, and is due to dehydration from the freezing out of water and the resultant high concentration of electrolytes. The current use of glycerine to prevent freezing injury is based upon its ability to pass freely through cell membranes, to bind water and to prevent it from crystallizing, thus reducing the ultimate electrolyte concentration to an acceptable limit.

As the rate of freezing is accelerated ice crystals begin to be formed within the cell, and mechanical as well as chemical injury becomes possible. Intra-cellular crystallization obviously can be tolerated only if the crystals are reduced to a sufficiently small size to be nontraumatic. The aim of any rapid freezing technique must be, by an appropriate choice of specimen size and geometry and of cooling medium, to attain an extreme rate of freezing through efficient heat exchange. Such a rapidly frozen microcrystalline preparation, however, is metastable since, unless the temperature is sufficiently low, crystal size may continue to increase in the solid state with larger crystals growing at the expense of small. In addition, electrolyte concentration remains as potentially lethal a factor as it was following slow freezing. Both crystal growth and denaturation by electrolytes are temperature dependent and for this reason storage temperatures must be low and thawing extremely rapid.

By recognizing and applying these principles to the freezing of whole blood, it has been shown that sufficiently rapid freezing can be attained if the blood is dispersed into extremely small droplets by spraying through a fine plastic capillary onto the surface of liquid nitrogen. Such frozen blood, when reconstituted by sprinkling the frozen droplets into warm saline or plasma, appears morphologically intact with respect to all the formed elements. Two human transfusions and several rabbit transfusions of whole blood containing

chromium 51 tagged erythrocytes demonstrate that normal survival *in vivo* is possible following this procedure. Casual examination finds the platelets somewhat reduced in number but morphologically intact. *In vivo* studies of platelet and leukocytes are in process with results not yet available. A battery of tests showed no demonstrable alteration in the clotting mechanism of the plasma.

Blood prepared in conventional ACD medium and subjected to freezing and thawing generally suffers about 15 per cent erythrocyte hemolysis. On the basis of the ability of strong hydrogens bonders to reduce crystallization velocity and thus decrease crystal size, either urea or additional glucose is added to the blood. Although there is some question regarding the rationale of this therapy, it has nevertheless proven successful, permitting the recovery of nearly 98 per cent of the erythrocytes.

Storage at temperatures higher than —50° C. results in prompt destruction of the blood. At —60° C. there is an accumulation of hemolysis during storage at the rate of 1 per cent per week. Preservation becomes increasingly good with lowered temperature. With storage in liquid nitrogen, actually the cheapest and easiest form of refrigeration, the period of preservation can be considered as essentially infinite.

THE ROLE OF PLASMA THROMBOPLASTIN COMPONENT (PTC) IN BLOOD COAGULATION

By Theodore H. Spaet
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During a study on the inactivation of blood thromboplastin, it was found that a plasma protein in crude fraction V of Cohn was responsible for thromboplastin inactivation. Since this protein exhibited many properties of antithrombin, the effect of thrombin in restoring thromboplastin activity was studied. Trace amounts of thrombin elicited considerable thromboplastin activity in mixtures containing inactivated blood thromboplastin. These data led to the discovery that thrombin was an effective substitute for plasma thromboplastin component (PTC) in the thromboplastin generation test. Moreover, thrombin corrected the impaired prothrombin consumption of PTC-deficient blood. The possibility of contamination of the thrombin with PTC was excluded by showing that thrombin inactivated in barium sulfate-adsorbed plasma had no effect on PTC-deficient blood, and that thrombin inactivated in barium sulfate-adsorbed serum was inert in the thromboplastin generation test. Nonspecific thromboplastic effects of thrombin were ruled out by the demonstration that thrombin failed to improve prothrombin consumption in hemophilic and thrombocytopenic bloods. Of interest is the finding that "PTC" activity was elicited in PTC-deficient plasma and serum by incubation with thrombin, although these mixtures failed to clot purified fibrinogen.

The hypothesis is suggested that PTC is a derivative of prothrombin which serves as a ready source of thrombin to initiate blood coagulation. It is further suggested that PTC deficiency consists of a failure to convert prothrombin into this derivative.

THE CONVERSION OF PROTHROMBIN TO AUTOPROTHROMBIN II (PLATELET COFACTOR II) AND ITS RELATION TO THE BLOOD CLOTTING MECHANISMS

By Shirley A. Johnson and Walter H. Seegers
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Under certain restricted conditions purified thrombin can be added to purified prothrombin and the latter transforms to a derivative called autoprothrombin II. Except in 25 per cent sodium citrate solution, the derivative has not been converted to thrombin. It functions as a co-factor with purified platelet factor 3 in the conversion of prothrombin to thrombin. Serum from healthy persons and in hemophilia A contains autoprothrombin II activity that can be adsorbed on $BaCO_3$. Autoprothrombin II, prepared in the laboratory, can be added to the two types of adsorbed serum and the autoprothrombin II activity is restored to the serum. Serum from a PTA patient, and a patient receiving Dicumarol® was found to contain very little autoprothrombin II activity. By adding an appropriate quantity of autoprothrombin II, prepared in the laboratory, the autoprothrombin II activity of the PTC serum was not completely restored whereas it was with the other two serum samples.

A NEW SERUM FACTOR (FACTOR X)

By F. Duckert, P. Fluckiger and F. Koller
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The results obtained with normal and pathologic sera in a modified thromboplastin generation test cannot be explained by interactions of only factor VII and factor IX (Christmas factor or PTC). The existence of a new clotting factor, factor X, must be postulated and it is also possible to prove that factor VII does not act in the formation of blood thromboplastin.

After treatment with a Dicumarol® derivative, Marcoumar, it is possible to observe in serum three phenomena: (a) factor VII activity decreases rapidly, (b) the activity in the thromboplastin generation test more slowly, and (c) the capacity of this serum to normalize factor IX deficient serum is not diminished. After vitamin K_1 administration, however, factor VII returns to the normal level without parallel normalization in the thromboplastin generation test.

This experiment alone excludes an important participation of factor VII in the thromboplastin formation and gives place to a new clotting factor, factor X. It is possible to confirm this hypothesis by carrying out experiments with purified factors and pathologic sera in different combination in pairs.

Partial purification of factor IX and X can be achieved by adsorption on $BaSO_4$ and elution with citrate solution.

Factor X reacts during treatment with dicumarol derivatives or vitamin K_1 more slowly than factor VII; it is deficient in the sera of patients suffering from hepatitis and cirrhosis; it is normal in factor IX (Christmas or PTC) deficiency.

ANAPHYLAXIS, RADIATION AND HEPARIN

By Frank C. Monkhouse
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The arrival of the Atomic Age ushered in by the bombing of Hiroshima and Nagasaki revived interest in the cause of the hemorrhagic syndrome associated with severe irradiation. In large-scale experiments Allen and his associates (J. Exper. Med., 87:71, 1948) were the first to suggest that the prolonged clotting time in irradiated dogs was due to the release of heparin. While they were able to extract an anticoagulant material from the blood of a few animals early in their experiments, they were not able to repeat their results and concluded (Allen, J. G., Blood Clotting and Allied Problems. Fifth Macy Conference, 1952, p. 231) that the anticoagulant may have been released as a result of an anaphylactic reaction following repeated transfusions. If such were the case, it suggested that irradiated animals might be more prone to anaphylaxis than normal animals. This consideration, plus the suggestion by Cronkite (In C. F. Behrens' *Atomic Medicine*. New York: Wilson, 1949 p. 146) that animals might possibly become sensitized to their own denatured proteins, led us to study the heparin output in anaphylactic shock superimposed on the effects of irradiation. For this purpose animals were sensitized to horse serum and subsequently shocked at varying intervals after body irradiation. Since it has been shown that heparins of different species exhibit markedly different anticoagulant potencies (Jaques, L. B., and Charles, A. F. Quart. J. Pharm. & Pharmacol., 16:1, 1941), we used rats, rabbits, guinea pigs and dogs. Our results indicate that in sensitized rabbits and dogs irradiation increases the degree of reaction to a given amount of antigen, provided this amount would cause a submaximal response in similar nonirradiated animals. While such a phenomenon might explain the presence of an anticoagulant reported to occur in irradiated dogs, it is difficult to see how it could be of any importance in the other species of this study. Rats are difficult to shock and the amount of heparin released by guinea-pigs and rabbits, even in fatal reactions, is very small. Apart from anaphylaxis, we have been unable to find heparin in the blood of rats, guinea pigs, rabbits or dogs at any time after these animals have been irradiated, even when signs of hemorrhage have been found after death. It is unlikely, therefore, that heparin is an important contributing factor to the hemorrhagic manifestations.

The importance of thrombocytopenia has been emphasized (Penich, G. D., E. P. Cronkite, I. D. Godwin and K. M. Brinkhous. Proc. Soc. Exper. Biol. & Med., 78:732, 1951). Their dogs were subjected to severe irradiation and showed definite prolongation of clotting time. We found that if dogs were exposed to small constant amounts of radiation, the animals could be maintained at a very low platelet level (below 10,000/cmm.) for two to three weeks without gross evidence of hemorrhage. Hemorrhage into the lymph nodes may possibly have occurred. These experiments suggest, however, that something besides platelet depletion is required to initiate bleeding when such long periods of thrombocytopenia can occur without it. In this regard the recent work of Savitsky and Sherry (Proc. Soc. Exper. Biol. Med., 85:587, 1954, and Savitsky, J. P., Blood 10:52, 1955) is very interesting.

IN VIVO AND IN VITRO STUDIES ON THE ACTIVATION OF THE FIBRINOLYTIC ENZYME IN HUMAN PLASMA BY STREPTOKINASE

By Sol Sherry
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It is well established that mammalian plasma contains a proteolytic and fibrinolytic enzyme precursor termed profibrinolysin or plasminogen. Upon activation, the proenzyme is converted to the active enzyme termed fibrinolysin or plasmin. At present, streptokinase (SK), an extracellular secretory product of hemolytic streptococci, is the most potent activator for human profibrinolysin.

The mechanism of activation of profibrinolysin by SK appears to be a two-step process. SK first combines with a plasma factor in stoichiometric fashion to form an activator, which then kinetically converts profibrinolysin to fibrinolysin. There is suggestive evidence that the plasma factor with which SK combines to form the profibrinolysin activator may actually be human profibrinolysin or fibrinolysin.

In animals, controlled fibrinolysis, capable of dissolving preformed occlusive arterial thrombi, as well as fibrinous exudates at sites of inflammation, has been accomplished by intravenous injections of streptokinase.

An exploration has also been undertaken of the therapeutic potentialities of intravenously admin-

istered streptokinase in man. During the infusion of SK, activation of profibrinolysin and suppression of antifibrinolysin activity occurs, and is associated with intense fibrinolytic activity. With the cessation of the SK infusion, the rate of profibrinolysin activation rapidly decreases and the antifibrinolysin activity rapidly returns to normal. These latter changes are associated with a rapid reduction in fibrinolytic activity. As suspected from *in vitro* observations fibrinogenolytic activity proceeds at a much slower rate than fibrinolytic activity. Although no serious toxic manifestations have been observed, "pyrogenic" reactions to the presently available SK preparations have hampered the *in vivo* study in man.

PURIFICATION OF TRYPSIN-ACTIVATED BOVINE FIBRINOLYSIN

By Edwin T. Mertz and Arthur Dalby
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A method for the preparation of trypsin-activated bovine fibrinolysin has been published (Jackson, H. D. and Mertz, E. T.: Proc. Soc. Exper. Biol. & Med., 86:827, 1954) and some of the properties of such preparations described (Ronwin, E. and Mertz, E. T.: Federation Proc. 14: 271, 1955).

Further studies on trypsin-activated products and fractions obtained therefrom have been carried out using an improved method of assay. The new procedure makes use of the conventional Warburg manometric technique. When fibrinolysin splits the ester group of *p*-toluene sulfonyl-L-arginine methyl ester (TAME), the amount of carbon dioxide released from bicarbonate buffer is measured. The advantages of this method, when compared with the fibrinolysis and null point titration methods, are speed, reproducibility, and the fact that only microgram quantities of enzyme preparations are required.

Current developments on the purification of bovine fibrinolysin in this laboratory were discussed.

INHIBITION OF THROMBIN FORMATION BY SULFHYDRYL OXIDIZING AGENTS: ATTEMPTS TO ELUCIDATE ITS MECHANISM

By J. L. Koppel, D. A. Mueller and J. H. Olwin
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The formation of thrombin is inhibited by oxidized glutathione and other sulfahydryl-oxidizing substances. This effect can be observed with purified prothrombin and with prothrombin as present in human and dog plasma. Evidence has been obtained to indicate that prothrombin itself does not play a direct part in the observed inhibitions. With all inhibitors tested, the degree of inhibition obtained is considerably higher with dog plasma than with human plasma. Increasing concentrations of oxidized glutathione in the presence of dog plasma result in inhibitions of thrombin formation approximating those found with human plasma. This suggests that a prothrombin conversion accelerator may be involved which is present in higher concentrations in dog plasma than in human plasma. Experiments have been carried out with purified clotting factors and various types of serum preparations in order to determine the point of these inhibitors. The inhibitions can be prevented by normal human serum or autoprothrombin I. The results of these and other findings suggest a possible interaction of the inhibitors with one of the constituents of the system concerned with the formation of this prothrombin derivative. They also suggest that free sulfhydryl are essential for the activity of this constituent. Possible implications of these findings are discussed.

SOME STRUCTURAL ASPECTS OF THE PROTHROMBIN-THROMBIN SYSTEM

By Kent D. Miller and Helen Van Vunakis
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Di-isopropylfluorophosphate (DFP) was found to have no effect upon purified prothrombin. Thrombin derived from this prothrombin was rapidly inhibited by very low concentrations of DFP. Quantitatively, both the clotting and esterase activities of thrombin are affected to the same extent by a given amount of DFP, suggesting that a common center may be functional in both enzymic processes. The reaction between the enzyme and DFP is accompanied by an uptake of phosphorus, a point which is of particular importance in establishing a means of labeling the active region of the molecule(s). Neither heat-denatured thrombin nor prothrombin bound phosphorus when exposed to DFP.

The inhibition of thrombin by DFP occurs whether the enzyme is derived from purified prothrombin by bio-activation or by autocatalytic activation in 25 per cent sodium citrate solution.

The over-all reaction by which tissue thromboplastin, serum accelerators, and ionic calcium activate prothrombin is unaffected by DFP. However, the activation of prothrombin in 25 per cent sodium citrate solution is completely blocked in the presence of DFP, establishing further the strict necessity for the presence of active thrombin in this activation process. Prothrombin activity in 25 per cent citrate plus DFP solution is completely stable, and no dissociation phase, that is, formation of TCA-soluble products, was observed.

No N-terminal or C-terminal amino acids have yet been found in purified prothrombin preparations by the dinitrophenyl technique or by carboxypeptidase digestion. Further studies, however, are necessary to confirm the absence of those ter-

minal amino acids either labile or resistant to the methods used thus far. Should further tests fail to reveal terminal amino acids, the question arises whether prothrombin is actually a cyclic protein or whether sugar residues are linked to the terminal end(s) of the protein.

STUDIES ON THROMBIN FORMATION

By H. Jensen
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In the coagulation of blood the conversion of prothrombin to thrombin is preceded by the formation of a prothrombin converting factor . The present investigation concerns itself with the intermediate reaction involving the formation of a prothrombin activator prior to the conversion of prothrombin to thrombin.

Preincubation of a $BaSO_4$-eluate from rabbit serum with platelets and $CaCl_2$ in the presence of plasma accelerator globulin or of antihemophilic factor or of both plasma accelerator globulin and antihemophilic factor, before addition of the "prothrombin" source to the reaction mixture, resulted in a marked enhancement in the prothrombin conversion as compared with a one-stage thrombin formation procedure. Replacement of platelets or $CaCl_2$ with buffer in the reaction mixture did not yield any prothrombin converting activity. The greater velocity of thrombin formation in the two-stage procedure indicates that precursory interactions of certain factors had been initiated or completed during the preincubation.

Preincubation of either platelets, antihemophilic factor and $CaCl_2$ or of platelets, plasma accelerator globulin and $CaCl_2$ or of platelets, plasma accelerator globulin, antihemophilic factor and $CaCl_2$, before addition of the "prothrombin" source plus serum eluate to the preincubation mixture, resulted in approximately the same rates of thrombin elaboration as found in the one-stage thrombin formation procedure. These findings indicate that no interaction between the various factors had taken place during the preincubation period under these conditions. It appears from these observations that antihemophilic factor as well as plasma accelerator globulin did interact with platelets and calcium ions only in the presence of factor(s) in serum eluate yielding prothrombin converting activity.

SOME EFFECTS OF PROTEOLYTIC ENZYME INHIBITORS ON BLOOD COAGULATION

By N. Raphael Shulman
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A proteolytic inhibitor with anticoagulant activity, a protein with a molecular weight of approximately 17,000, was purified from normal human plasma and urine. The nature of its action as an anticoagulant was studied and was compared with that of the soy bean trypsin inhibitor. The mechanism of inhibition of coagulation was found to be the same with both inhibitors.

The data obtained on thrombin yield and the time-course of thrombin formation by varying concentrations of the various reagents in mixtures, consisting of purified prothrombin, thromboplastin, serum accelerators of prothrombin conversion, proteolytic inhibitor, and Ca^{++}, led to the following conclusions. Inhibition of thrombin formation is not due to interaction between inhibitor and any of the materials present in the system before activation of prothrombin takes place or between inhibitor and thrombin. The degree of inhibition of thrombin formation is, however, related directly to the amount of prothrombin used and inversely to the rate of conversion of prothrombin into thrombin. A model reaction which fits all of the data necessitates postulating that a compound intermediate between prothrombin and thrombin exists and that the inhibitor acts on this intermediate product which is formed during the conversion of prothrombin to thrombin. The model is:

1. Prothrombin (P) $\xrightarrow{k_1}$ Altered prothrombin (P*)
2. P* $\xrightarrow{k_2}$ Thrombin (T)
3. P* + Inhibitor (I) $\xrightarrow{k_3}$ P* I

k_1, k_2, k_3 = rate constants

The arrows in the above reactions point in only one direction since it appears that all of the steps are irreversible under ordinary conditions required for prothrombin conversion. Reactions 2 and 3 occur simultaneously. The amount of P* ·I formed is dependent on k_2, and k_2 is dependent on conditions which are known to affect the rate of formation of thrombin from prothrombin, i.e., on the concentration of thromboplastin, accelerators, Ca^{++}, and on temperature. The greater k_2, the less P* ·I formed. Once P* ·I is formed, the bound P* is not available for conversion into T. The factors which convert P* into T do not compete with I for P*, and P*·I under these conditions is not dissociable. P* ·I, however, can be dissociated by trypsin because the dissociation constant of the inhibitor-trypsin complex is smaller than that of P* ·I. When an amount of trypsin equimolar with respect to I is added to the inhibited reaction, units of thrombin recovered are equal to those obtained if no inhibitor is present.

The following formula, expression inhibition in terms of the various conditions which affect it, was devised by Dr. John Z. Hearon:

$$\text{Units inhibited} = \frac{P_0 I}{\frac{k_2}{k_3} + I}$$

P_0 = units prothrombin used
I = inhibitor concentration

Experiments using whole plasma indicate that P* apparently always forms during normal coagulation. The naturally occurring anticoagulant proteolytic-inhibitor is estimated to be present in plasma in sufficient amount to act in the early stages of blood coagulation. The plasma inhibitor can be considered as a buffer in coagulation. It would be completely effective in preventing thrombin formation at the slow rates of P* formation which might occur intravascularly as its effect would diminish and become insignificant with the increased rate of prothrombin conversion which occurs extravascularly. The inhibitor may be of importance in maintaining the fluid state of the blood.

COMPARISON OF SOME PROPERTIES OF PLATELET AND TISSUE EXTRACTS

By Edmund Klein and Sidney Farber
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Lipid constituents of platelets, and other mammalian and avian tissues which contribute to the correction of the defective generation of thromboplastin in thrombocytopenic blood, have been obtained. Reference will be made to studies of John Garrett, at present associated with our group, and to the collaboration of Marian Rumley. Purified preparations were active at concentrations of one part per million. At high concentrations these preparations appeared to inhibit the generation of thromboplastin and the coagulation of fibrin by thrombin. During the course of purification, at least some of the inhibitory activity was removed. The purified preparation obtained from platelets resembled those from other tissues in their solubility characteristics and in their respective ultraviolet and infrared spectra.

The wide distribution of the activator suggested investigation of organisms without a circulatory system, and presumably, therefore, without a blood clotting mechanism. Active preparations have been obtained from yeast, which may imply that this activity is not necessarily related to blood coagulation.

PREVENTION OF ACCIDENTAL TRAUMA

(Continued from Page 948)

with his environment in the past fifty years. This struggle, resulting in a remarkable degree of control, has been directed against the communicable diseases, using such means of control as sanitation, immunization and the newer antibiotics. Today, machines and toxic chemicals—thanks to our technologic progress—loom as greater threats to life than germs. The protection of the individual from these and other causes of injury is a challenge worthy of the skills of modern medicine and public health. Accident prevention has the added value of being an ideal subject for the public relations program of the medical profession.

Accidental trauma, of all the leading causes of death, offers the most promise at the present time for further improvement in life expectancy.

INJURIES TO THE GENITO-URINARY TRACT

(Continued from Page 953)

In all cases, any evidence of extravasation is an immediate indication for suprapubic exposure and repair of the injured viscus. The technique for correction of the transperitoneal defect consists of removal of all blood and urine by suction, followed by primary 2 layer suture of bladder wall and peritoneum. Suprapubic cystotomy for the ensuing ten days to two weeks provides the necessary safety valve permitting diversion of urine while healing takes place.

In conclusion, it is apparent that the physician in his present role of reluctant referee in the race between horsepower and horse sense will be called upon frequently to treat patients with injuries involving multiple structures. It is imperative that he maintain a high degree of suspicion as to the existence of injury to the genitourinary tract and avail himself without delay of the simple diagnostic measures suitable for survey of this patient Immediate correction of existing abnormalities may permit quick return of the patient to a useful existence. Failure to recognize the underlying injury may result in death or a degree of urologic incapacity far worse than that produced by many of the more apparent external injuries so dramatically obvious on initial inspection.

Editorial

THE CARE OF TRAUMA

Trauma occurs in every part of our state and is no respector of age, sex or social position. There are many facets of the problem that properly belong to the non-medical population. This fact was emphasized at the recent Mid-Western Conference of the President's Committee on Traffic Safety. Local citizens' committees were formed to promote education in all aspects of traffic safety and to aid enforcement of existing laws. However, at this conference too, physicians were well represented because of the known interest of the American College of Surgeons in the handling of trauma.

Highway trauma is only a part of the multitude of injuries suffered by the civilian population. The additional possibility of mass casualties should alert the medical profession to the need for immediate organization for the handling of such disasters. The complacent individual who feels he is completely capable of caring for any emergency need only to read the report of the Worcester tornado to learn that almost all of the treated wounds became infected. Few know that the Flint physicians had a "practice emergency" the night prior to their second tornado. This preparation expedited the orderly care of all medical emergencies.

Wayne, Kent and Genesee Counties account for more than 50 per cent of physicians in the State of Michigan. It is conceivable that atomic attack could neutralize these countries. This would immediately force the medical care of trauma on the shoulders of the physicians in the smaller cities and rural areas. Organization now can do much to prevent chaos!

The Michigan State Medical Society for many years has fostered the postgraduate education of the practicing physicians. With such organizational "know-how" and the co-operation of institutions and groups interested in the care of trauma, the program should be a success. We have two willing medical schools in our state. The Michigan Regional Committee on Trauma of the American College of Surgeons stands ready to help at both a state and local level. This organization for several years has conducted five major educational meetings annually and many more on a local level. Much worthwhile literature on the care of trauma is available through the College of Surgeons office. The means for adequate organization and education is available. Only complacency can stop us.

HOMER M. SMATHERS.

DUTIES WELL DONE

Public Works AMA

One outstanding quality of the recent AMA meeting in Chicago was the meticulous discharge of responsibilities by great numbers of interested persons who served for "love of the cause." At one time, the Speaker of the House announced that there was 100 per cent attendance, not a single member being absent. The seats were seldom empty while sessions were held. The reference committees were also crowded, and most subjects which could have been controversial were well debated in committee.

Michigan had its usual active official delegation which met always for breakfast to exchange ideas and to hear reports; to visit with delegates or officers from other states. Michigan has six delegates, six alternates and one section delegate, of which one delegate and one alternate could not attend. The State may be proud of the work accomplished.

House of Delegates MSMS

Regarding the in-state service, probably the general membership is unaware of the vast amount of time and effort needed to keep our Michigan State Medical Society in the forefront of medical statesmanship. Our House of Delegates consists of 137 members who will meet two days, September 24-25, 1956, in five sessions and sixteen reference committees which often continue until the early morning hours. These meetings precede the scientific sessions on September 26, 27 and 28.

The House of Delegates is the legislative and policy making body of the Michigan State Medical Society. At noon, on September 25, 1956, the House of Delegates constituting the membership of Michigan Medical Service conducts its annual

meeting, including election of members of the Board of Trustees.

The Council

The House of Delegates, while in session, is the law-making body, but the continuing work of the Society falls upon The Council which consists of eighteen district-elected representatives and six elected officers. Yearly, there are three stated meetings of the complete Council held in January, July and September, each lasting three days. The other months are provided for with one-day meetings of the Executive Committee of eleven men, held in various parts of the state. The President, President-Elect, Executive Director, Public Relations Counsel, Legal Counsel, and the Editor attend all these meetings.

Every activity of every committee or officer is reported item by item and must be approved before the action is official and binding on the Society. From seventy-five to one hundred items are considered at each meeting, involving many exhausting hours of concentration.

Only a deep love of their profession and a keen sense of duty would keep these officers active year after year. The twelve official meetings of The Council and its Executive Committee account for more than 120 hours' time, not to mention the time of numerous committee chairmen and others invited to attend and make reports, or offer technical advice.

Much of the detail work of the medical profession and the Society is delegated to over sixty committees, involving 568 members. If each member gave only one day a year, and most contribute much more, there is again about as many hours as The Council gives. When one counts up the amount of work donated by our devoted members, the figures are indeed staggering.

We believe the Society and its members really do appreciate this service when it is invited to their attention.

MEDICAL EDUCATION

A spectacular feature of the AMA meeting in Chicago, June 10 to 16, 1956, was the presentation by F. Lee Stone, M.D., President of the Illinois State Medical Society, of a check for $164,914 to the American Medical Education Foundation. The Illinois State Medical Society last year assessed all of their members $20 apiece. Several state medical societies have given large amounts in the past years. The AMA started the program with one half million dollars, which it continued for several years, but lately the contribution has been cut to $100,000.

The American Medical Association and our members are unwilling for government to take over the education of our medical men. We fear the socializing influence which might develop, especially since the Supreme Court decision of a few years ago stating that whatever the government subsidizes it may dominate. Medical education has become much more extensive, searching and expensive. It was estimated several years ago that 10 million dollars a year are needed to augment the amounts now available to the medical schools. The American Medical Education Foundation was established and has been receiving donations from the profession and others interested, but the sum is never enough. Another appeal is now made for funds. This is a worthy and very needy cause, and every doctor is urged to make some donation each year in partial payment for the partly free education he received.

The Michigan State Medical Society also has a Foundation for Medical and Health Education which is administering loan funds to aid interns and medical students in continuing their education. A contribution to this cause is indicated.

The Beaumont Memorial Restoration Fund is still several thousand dollars in the red, and the committee would like to close its books.

These two Michigan projects were established several years ago and a good percentage of our members never had an opportunity to contribute. Both causes are worthy, and while no campaign is contemplated, contributions would be welcomed. The Beaumont Memorial will carry a listing of contributors when completed.

Someone suggested a couple of years ago that each doctor make a contribution to some or all of these funds for his anniversary or birthday remembrance. It has also been proposed that when a friend dies, especially among the doctors, we send a gift to one or the other of these worthy causes as a memorial.

Think it over, but let us all do something.

THE HOSPITAL SERVICE PLAN OF BATTLE CREEK

The Hospital Service Plan of Battle Creek is an entirely new and pioneer concept of social service. From the very beginning of the Battle Creek Com-

munity Chest in the early nineteen twenties, the organization was rightly named "The Welfare Fund." Of the twelve to fifteen agencies making up "The Fund," almost all were engaged primarily in relief. The Boy Scouts, Camp Fire Girls and YWCA were character-building, but the Society of St. Vincent de Paul, Salvation Army Relief, Charitable Union, Community Relief and Hospital Relief were all devoted almost entirely to material relief for needy people.

At first, Nichols Hospital (now Community) and later Leila Hospital were on the lists for many thousands of dollars which were primarily to make up deficits produced by the operating on, and caring for, their charity patients. There never was an endowment fund for the hospitals and they had to do their own financing. The Welfare Fund, Community Fund, now Community Chest, supplied relief money the same as for the many other relief agencies.

During the years, and especially when more people were earning living wages, the administrators of the Community Chest were disturbed by the use of so much money to pay the bills of persons who refused to meet their own obligations, or were unable to do so. They began studies for an improvement in the service given by the hospital allotments.

During the middle thirties, the Calhoun County Medical Society made a survey, looking for methods of payment for medically indigent persons who were hospitalized. It was found that if arrangements for aid were made before the patient entered the hospital, help was often available, but not after the patient was hospitalized. The Calhoun County Medical Society found forty-four agencies in the county with available aid facilities which were limited and restricted if arranged in advance.

The Community Chest officers knew of certain social services rendered by some great hospitals, so reassigned the available money for use, not as relief but for advisory service, through the Secretary of the Community Chest. A year of trial resulted in the organization within the Chest of an entirely new group whose duties would be never to administer material relief but if possible to serve newly entered patients in hospitals if there was a question of ability to pay. Doctors were requested to consult the Hospital Service Administrator before sending the patient into the hospital—if possible.

Two years ago, an Administrative Board was organized, and Mrs. Paul Tammi was engaged and put to work. She grasped the theory of efforts and within the first nine months collected, from hundreds of different sources, enough aid for medically indigent patients to pay one of the hospitals more than the Chest had been giving them in three years' time.

She found myriads of sources of aid for the patient before hospitalization, and she has a long list of prospective people, organizations, and others that can and are willing to help when shown the need. Mrs. Tammi has developed into an angel of mercy for many who otherwise would have occupied hospital beds with no payments or extremely meager ones. Her service has grown into one of advice and counsel in many facets of community life.

Battle Creek is proud of this service effort. It is home grown and, to our knowledge, not found in any other place. The Plan is incorporated and functions with a Board of Directors. The work and services rendered are out of all proportion to the small amount budgeted, which all goes for salary and incidentals, not a cent for material relief. This relief is augmented by the Department of Social Welfare in a great many cases. The Bureau of Social Welfare Administrator was an advisor in the establishment of the service, and he is completely familiar with the work.

HUMAN RELATIONS IN THE MEDICAL PROFESSION

(Continued from Page 962)

act you perform is backed by the prayers of many people, who call down God's blessing on your work. I should like to conclude by paraphrasing part of the oath and prayer of Maimonides, the great Jewish sage of Cordoba. Believe me, I say it from my heart:

"May God stand by you in your important task and grant you success. For without His loving counsel and support, man can avail but naught. May you be inspired with true love for this your great profession and for all human beings. Grant that neither greed for gain, nor thirst for fame, may interfere with your activity. For these we know are enemies of truth and love of men. May you be granted energy of both body and soul so that unhindered you will always be ready to mitigate the woes, sustain and help the rich and the poor, the good and the bad, enemy and friend. May you ever behold in the afflicted and suffering only the human being."

A "Long Look" at the Healing Arts

It is apparent that the Michigan State Medical Society must give serious study to the attitude to be taken toward the various healing groups permitted to practice in Michigan. The definition of our attitude toward certain healers and the preparation of recommendations designed to implement that attitude have been made the responsibility of a special committee of The Council.

Healing groups that wish to practice medicine must do two things to gain full public recognition:

1. They must throw away any type of healing that stigmatizes them as a cult.
2. Their clinical teaching must be by those who are qualified to teach the science of medicine.

Only after these two basic requirements shall have been satisfied can any healing group begin to gain recognition as an orthodox profession.

Certain groups in Michigan—other than M.D.'s—are practicing medicine. It may be of a lower calibre than that practiced by the medical profession but it is nonetheless the practice of medicine. It may be illegal—but it is being done every day. This overt activity is the keystone upon which these healers base their claims for greater privilege.

My recommendation to such healers is that they substitute better teaching in their clinical years for the pressures they now exert. Better education is their critical need—not to be satisfied by any possible legislative fiat. Their clinical experiences will rise to a higher calibre only through the ethical assistance of qualified medical instructors.

These are facts with which the medical profession must reckon. A great service to the health of the people would be to help resolve this problem, especially if the aid of the medical profession is sought by these other healers.

W. B. Jones.

President, Michigan State Medical Society

President's



Message

M S M S 91st Annual Session

State Society Night

SHERATON-CADILLAC HOTEL, DETROIT — SEPTEMBER 26-27-28, 1956



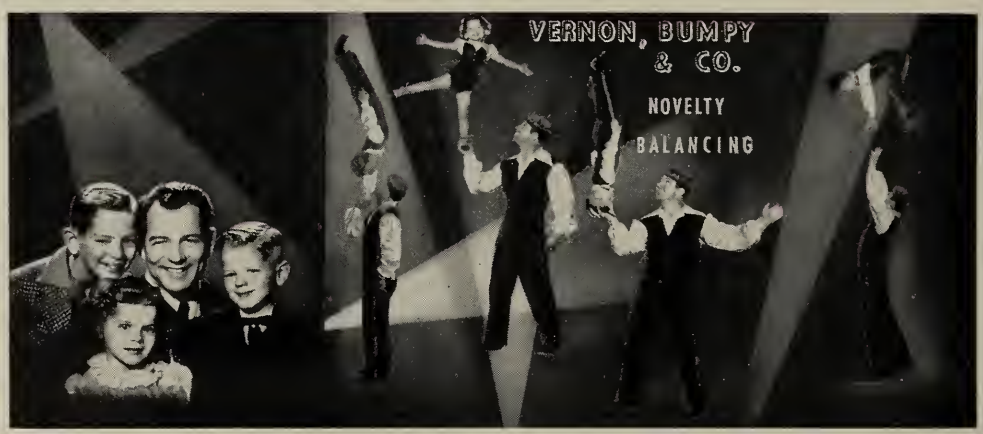
ELMA SANTA—A very beautiful and talented girl who will stroll with her accordion.





DICK KEFGEN is an outstanding musician and entertainer. He is a handsome and personable chap and is considered to be one of the finest harmonica virtuosos in America. His repertoire includes classical numbers; currently popular numbers; and some nostalgic ones. He is quite similar to the great Larry Adler, the dean of harmonica players.

JACK MARSHALL—A very wonderful comedian and Master of Ceremonies. He has a lot of personality and showmanship. His material is exceptionally funny, he has a fine sense of timing and a brilliant delivery. He was a former Hollywood gag writer and his material is smart and refreshingly different.



VERNON, BUMPY AND COMPANY—A father and his three children, ranging in age from three to eight, who perform one of the finest and most thrilling balancing and acrobatic acts in show business. After their recent appearance on the Ed Sullivan show, Mr. Sullivan said, "This, ladies and gentlemen, is one of the finest acts I have ever had the pleasure of presenting on my show." Fine praise, indeed.

Annual Reports

ANNUAL REPORT OF THE COUNCIL

1955-1956

The Council held three sessions totalling eight days, and the Executive Committee of The Council convened ten days (to September 23, 1956), a total of thirteen meetings up to the date of the 1956 Annual Session of the Michigan State Medical Society. This represented a total of 106 hours of deliberations, equivalent to thirteen days and two hours on an eight-hour working day basis, but as in the past, this total does not include additional time necessarily spent by the twenty-five members of The Council going to and returning from meetings, held in various Councilor Districts throughout the State. All matters studied (1,056 items) and recommendations made by The Council's Twenty-nine Committees as well as by the Society's nineteen Committees, and all business of the Society, were referred routinely to The Council or to its Executive Committee for consideration and action.

Membership

Membership as of June 30, and as of December 31, from 1935 to 1956, is indicated in the following chart:

	1935	*1945*	*1950*	*1953*	*1954*	*1955*	*1956*
June 30	3410	4425	4881	4977	5111	5503	5794
December 31	3653	4686	5114	5330	5787	6109	——

The figures for 1956 include 5231 Active Members, 186 Emeritus and Life Members, 32 Retired Members, 345 Associate and Military Members.

Finance

As in the past, the first item of new business on the monthly agenda of The Council or its Executive Committee is "Study of Monthly Financial Reports." Every thirty days, therefore, the Society's financial picture is reviewed and governing policies established. In addition, the Finance Committee meets periodically to study and to advise The Council on particular fiscal questions.

The auditor's report for 1955 plus the budgets of the Society for 1956 were published in JMSMS, March Number, beginning on Page 332. Members are invited to acquaint themselves with the financial status of their State Medical Society and to offer suggestions; these always are truly appreciated. As of June 30, 1956, 5231 members paid Society dues amounting to $148.905.50. This was on the basis of $28.50 per member allocated to the General Fund as established by The Council in January, 1956, and includes some payments by new members of portions of a year. Also, $26,115.00 accrued to the Public Education Reserve Account, $32,643.76 accrued to the Public Education Account, $18,280.50 accrued to the Public Service Account, and $27,420.74 accrued to the Professional Relations Account, for current activities as directed by The Council in January, 1956. The sum of $10,446.00 was set aside in a Building Fund as well as $15,669.00 in a contingent surplus fund. A brief financial résumé of each of the MSMS activities as of June 30, 1956, is presented in the accompanying table.

The AMA dues collected by county medical societies, forwarded to MSMS, and then mailed to the American Medical Association during the six months to June 30, 1956, totalled $128,300.00. The very high percentage of AMA dues being paid by MSMS members (98.1 per cent) is to be noted; The Council feels that the members of our State Society are to be congratulated on their tangible cooperation with and support of the American Medical Association. A résumé of the financial condition of the Michigan State Medical Society as of August 31, 1956, will be presented to the House of Delegates at its opening session of September 24, 1956, as a part of The Council's Supplemental Report.

Financial Report for Period Ending June 30, 1956

Account	On Hand 1/1/56	Income to 7/1/56	Expenses to 7/1/56	Balance on Hand 7/1/56
General Fund	$ 77.593.98	$151,115.18	$ 83,971.16	$144,738.00
Annual Session	---o---	23,622.50	2,944.62	20,677.88
Michigan Clinical Institute	---o---	13,210.00	12,733.42	476.58
The Journal	---o---	40,304.99	37,215.21	3,089.78
Public Education	76,494.02	32,738.71	21,840.55	87,392.18
Public Service	281.28	18,280.50	5,252.03	13,309.75
Professional Relations	6,805.30	27,420.74	16,955.82	17,270.22
Public Education Reserve	30.000.00	26,115.00	---o---	56,115.00
Rheumatic Fever Control	22,704.24	10,000.00	13,575.68	19,128.56
Surplus from Dues	37,267.34	15,669.00	- -o---	52,936.34
Building Fund	13,788.46	10,446.00	4,912.42	19,322.04
Beaumont Memorial Fund	–9,790.29	691.00	---o---	–9,099.29
Totals	$255,144.33	$369,613.62	$199,400.91	$425,357.04

Thus far in 1956, $48,539.06 of the funds of the Michigan State Medical Society have been invested in short-term securities. These funds are invested during the early part of the year when income resulting from dues payments is high and thus earn interest for the commercial account. These securities mature later in the year when income is low and expenses continue at the regular rate. Any securities maturing, the funds from which are not immediately required, will be re-invested upon the advice of the Finance Committee. Interest income from securities held by the Michigan State Medical Society has accrued during the first six months of 1956 in the amount of $1,010.93.

The Journal

Fifty-five years ago, the newly-created Officers and Councilors of the Michigan State Medical Society with the late Dr. Andrew P. Biddle serving as Editor, foresaw the great advantage of a monthly contact with the membership instead of the previous yearly publication, "The Transactions." The Journal furnished a medium of communication of all the materials and actions of the parent State Society and was distributed monthly along with reports, news, editorial messages combined with scientific papers. The project paid in multiples as evidenced by the growing Society and the interest in medical and socio-economic affairs.

The Journal was founded on the "house organ" theory and has been completely successful. It has grown from a small "patent medicine" affair with a few hundred copies each month, to as many thousands with over 1,500 pages, a supplement directory, ambitious composition, art work and extensive recognition of the various activities of the medical profession. Almost every number is dedicated to different activities of our profession with editorial material, news, reports and special articles featuring the special topic of dedication.

For several years, we have devoted The Journal covers to divergent and essential activities of special departments, committees or economic and socio-medical concern. Every cover is individually designed to represent some activity or special interest, in two or more colors, and all have attracted wide notice among other editors. We are proud of our diversified interest and challenging cover display. Our August, 1955, Journal was devoted to Industrial Medicine and featured a factory with a doctor in the foreground, in September the Coller-Penberthy Clinic with the cover featuring the sponsor, Dr. E. L. Thirlby of Traverse City. October was devoted to the Generalist and November to Tuberculosis

using the Christmas Seals on the cover. In December it was the Michigan Clinical Institute and the theme "Doctor, Don't Be Left Outside;" Heart and Rheumatic Fever with a dramatic cover showing two hands pulling at a chain to show the chain can be broken, was the January number; February honored the University of Michigan Medical School, and March honored Wayne State University College of Medicine, both covers featuring campus buildings as the background; April was devoted to Cancer Control with the cover depicting three swords as the weapons against cancer: education, research and service; May stressed a rural scene and the new doctor and was devoted to the Michigan Foundation for Medical and Health Education; the June issue was dedicated to Michigan Medical Service and featured the Blue Shield; July was the Annual Session number, and August—Trauma.

We have continued our editorial emphasis on medical and socio-economic questions involving the welfare of our profession. All editorials involving policy and economic trends are previously submitted in preliminary form to the Publication Committee, plus a selected group of officers and specially interested or informed persons, in the belief that the thoughts expressed should reflect the opinions and approval of others as well as of the Editor.

For the most part, scientific editorials have been left to some specially designated writer while book reviews, news, and features have been the responsibility of the Editor. Special assistants have been designated for certain Numbers and their work has been most welcome and helpful and we are grateful to them.

The editorial tasks and responsibilities have been continuously encouraged and vastly assisted by the Publication Committee, the Executive Committee and numerous helpful friends to all of whom the Editor confesses obligation. The numbers of THE JOURNAL for the coming year have been in some measure allocated, but some are still available to feature some special activity which members may wish to suggest.

Organization

1. The Annual County Secretaries—Public Relations Seminar—a three-day indoctrinational course—was held in Detroit on January 27, 28, 29, 1956, with 151 attending. The general consensus of those attending was "it was the *best*."

"So You've Been Elected"—a new "bible" of county society organization—made its debut at the 1956 Seminar. This highly illustrated handbook of medical society teamwork, produced by the Michigan State Medical Society, is intended to make it easier for county society officers to assume with greatest effectiveness the responsibilities of component society leadership.

2. The Tenth Michigan Clinical Institute was held in Detroit March 7-8-9, 1956, with an attendance of 2,475, including 1,421 M.D.'s. The popularity of the MCI, as a purely scientific or postgraduate medical meeting, improves year after year.

3. The usual semi-annual meetings of the seven Delegates from Michigan to the American Medical Association House of Delegates, including Grover C. Penberthy, M.D., Detroit, AMA Surgical Section Delegate, as well as the six Alternate Delegates, were held with the Executive Committee of The Council immediately prior to the June and December sessions of the AMA. Our Delegates and Alternates are doing efficient work and are gaining well-merited recognition in the AMA House of Delegates.

4. The Residents-Interns-Senior Medical Students Conference again was held in Detroit, March 7, 1956, coincident with the Michigan Clinical Institute.

MSMS again sponsored financially the sending of Delegates from Michigan's two medical schools to the Student AMA Convention in Chicago in May, 1956.

5. The 90th MSMS Annual Session in Grand Rapids, September 28-29-30, 1955, attracted a record registration —for Grand Rapids—of 3,585, including 1,671 M.D.'s.

An innovation at the 1956 (91st) Annual Session, scheduled for Detroit September 26-27-28, will be the "Officers Night Banquet," scheduled for Wednesday evening, sponsored jointly by MSMS and its Woman's Auxiliary.

6. More national medical leaders from Michigan are gaining recognition; during the 1956 Michigan Clinical Institute, nine Michigan doctors of medicine were honored for achieving during the past year the presidency of national medical associations:

William H. Beierwaltes, M.D., Ann Arbor—American Federation for Clinical Research
Arthur C. Curtis, M.D., Ann Arbor—American Board of Dermatology and Syphilology
Russell N. DeJong, M.D., Ann Arbor—American League Aginst Epilepsy
Thomas Francis, Jr., M.D., Ann Arbor—American Epidemiological Society
A. C. Furstenberg, M.D., Ann Arbor—American Academy of Ophthalmology and Otolaryngology
Clarence S. Livingood, M.D., Detroit—Society of Investigative Dermatology
Richard H. Meade, M.D., Grand Rapids—American Association for Thoracic Surgery
Frederic Schreiber, M.D., Detroit—Harvey Cushing Society
Wolf W. Zuelzer, M.D., Detroit—Society for Pediatric Research

7. During the past year, W. S. Stinson, M.D., Bay City, was appointed as Councilor of the Tenth District to serve the unexpired term of F. H. Drummond, M.D., Kawkawlin, resigned.

8. Modern handling of MSMS membership records. During recent months, The Council approved a changeover from the old Kardex system to IBM records covering the MSMS membership, to achieve more efficiency in the State Society headquarters as well as to aid county medical societies in their arduous task of billing for membership dues (county, state, and AMA). The new system was explained to all county society officers at the Councilor District Conferences held throughout the State this summer.

Inasmuch as all membership billing will be done by the Michigan State Medical Society and the county society secretary will be relieved of this former detail work, the 1 per cent collection credit now remitted to component societies should be used by MSMS to offset the expense of the additional investment and maintenance of the efficient IBM system.

A recommendation on this subject follows.

9. Organization among the fifty-five component county societies, covering all of Michigan's eighty-three counties, was well maintained during the past year. The scientific side of medicine in this state continues at an all time high.

MSMS is gratified at the increased interest in socio-economic matters on the part of its component societies, evidenced by many more requests to the State Society for assistance (examples: many invitations to State Society officers, especially President W. S. Jones, M.D., for personal appearances before component societies; and far more questions referred to MSMS for legal opinion from our Legal Counsel.)

Public Relations

Attitudes antagonistic to the private practice of medicine continue to crop up frequently in legislative chambers, both state and national, at the industrial bargaining table, in newspaper and magazine headlines, and in the public statements of various figures who have many personal followers. These continued undercurrents prompt a deeper awareness of the need for good public relations. Since the ultimate purpose of all MSMS public relations efforts is to maintain freedom in medicine, a consciousness of public relations is necessary in the development of almost every activity of your State Medical Society. The Society has repeatedly

re-evaluated its policy in almost every field in the light of its public relations impact.

Since it penetrates so deeply into the activities of our Society, public relations no longer can be measured wholly in terms of inches of newspaper space, hours of radio and television time, the number of speakers before groups of community leaders, and other such gauges used at times in the past. Such methods of mass communication maintain their importance—and their volume and success continues to be impressive (see PR Committee Report). But other less obvious factors are of growing effectiveness in the promotion of good public relations for MSMS and the medical profession. Numbered among these are such items as the stronger relationships built year by year with professions and organizations who share with Medicine a great stake in preserving American freedom, better understanding within our own profession of the future aims and achievements of medical organization, the atmosphere of trust within our state government and with the Legislature which have accumulated to MSMS through the years, and the teamwork evident in county society co-operation with MSMS.

Several new steps have been taken during the year to promote this new depth of PR penetration. Noteworthy was the publication of a handsome brochure called "Progress . . . Because Doctors Work Together" which for the first time tied together the goals, achievements, and services of MSMS, and the scope and structure of medical organization. This booklet, initially distributed to all MSMS members and now being sent individually to each new member, is a summary which gives new perspective to participation in the affairs of MSMS.

Meetings with officers and key members of county medical societies continued throughout the state in the interest of stimulating local public relations programs and the use of services and facilities of MSMS in carrying out such programs. The internal strength of medical organization in Michigan was greatly furthered by the intensive schedule of speaking appearances by President W. S. Jones, M.D., before county societies and hospital staffs in every section of the state.

Worthy of special mention was MSMS participation in the first nationwide observance of Medical Education Week. This observance was the springboard used to launch great quantities of information on progressive efforts of the medical profession to increase medical service and to improve medical practice in Michigan.

Establishment of a Public Relations library at MSMS headquarters in Lansing was authorized and work was begun to catalogue the thousands of items of public relations information and tools accumulated by MSMS in recent years. When set up in proper form, the library will be an efficient source useful in future PR planning.

During the long legislative session of 1956, again the medical profession lost none of its freedom in Michigan, and standards of medical care were maintained in the face of numerous threats. Quality health care for the people of Michigan remained untouched, even though sub-standard healing groups waged intensive campaigns to increase their privileges by legislative fiat.

Since the future strength of medical organization and the preservation of medical freedom in the next decade depends upon the coming generation of doctors of medicine, MSMS during the past year stepped up its work with future physicians. In close collaboration with the state's two medical schools, MSMS took steps to intensify the education of medical students in medical economics and the social implications of private practice in Michigan. This is an area to which we must devote much time and attention, building upon what is now but the groundwork for the type of program which should be carried out.

Unless we consider effective public relations activity as merely a delaying action in the struggle to preserve the private practice of medicine, a consciousness of public relations should penetrate far deeper into every facet of MSMS program planning and execution, even in those areas which on the surface appear to be purely scientific in nature. In government, in industry, and in community life today even the conservative elements entertain many ideas which if carried to the ultimate could greatly curtail the freedom of the medical profession to the detriment of the people it serves. The threat of the ill-informed "conservative" who unknowingly or unthinkingly chisels away at medical freedom may in the future present a greater problem than the so-called "liberal" who is outspoken in his intentions and whose goal has been spelled out openly. We refer to the businessman who fails to support the principles of professional men as opposed to some union leaders who seek to place professions into the category of governmentally-controlled public utilities.

At every opportunity in every relationship, the medical profession, collectively and individually, must understand the profession's public relations responsibilities—and fulfill them—if the people we serve are to continue to benefit from medical freedom.

Woman's Auxiliary

The Woman's Auxiliary to the MSMS has had "a good year"—a stimulating and enlightening year—and above all, one of excellent co-operation and combined efforts. Each auxiliary has, in some way, done outstanding work and has contributed greatly to the projects of the state and national auxiliary. It is regrettable that each cannot be cited separately.

The year has been punctuated with many notable achievements—a few of which are:

Fifty Organized Auxiliaries—with a membership of 3,059 and 287 new members.

American Medical Education Foundation—a contribution of $3,200.00—an increase of 23 per cent over last year and an average of over $1.14 per member. In addition, Michigan was among the "top ten states" in the 80 Dimes Campaign—with $665.50 raised.

Nurse Recruitment takes top billing with all our auxiliaries—each participating in some way in this project. $11,349.73 was spent for recruitment activities —with $486.08 for Future Nurse Clubs;—$3,538.65 for Loans;—and $7,325.00 for Scholarships. This was an increase of 28 per cent—or an increase of over $2,500.00 from last year.

Today's Health—88 per cent of our state quota. An increase of 13 per cent. Fourteen auxiliaries reached 100 per cent or better. Mason County Auxiliary—with a membership of nine—reached the almost unbelievable heights of 1,922 per cent; for which it received a check for $25.00—second prize nationally in the 1955-56 Subscription Contest. In addition, Michigan was honored at the Second Annual *Today's Health* Breakfast held in Chicago during the convention in June.

Annual Tuberculosis Speaking Project—A total of 3,465 students from eighty-seven schools scattered over forty Michigan counties participated in this project, sponsored jointly by the Michigan Tuberculosis Association and the Woman's Auxiliary to the Michigan State Medical Society. One hundred and sixty talks were submitted for state judging. Students spoke to school and community audiences totalling about 13,115; with local radio programs, about forty, arranged by schools or local county auxiliaries.

A survey of the various Volunteer Services given by doctors' wives in their respective communities brought forth this result: based on returns from 30 auxiliaries—a conservative estimate was 35 hours per member per month. Outstanding public relations and again evidence that doctors' wives more than carry their share of responsibility.

The auxiliaries responded effectively to the request of the MSMS for sending letters and telegrams re Bill HR 7225; and have kept informed as to the status of bills suggested for our study by the AMA this year.

Increased interest in Civil Defense, Mental Health,

and Safety has been shown—many auxiliaries having programs devoted to these subjects.

There are many more accomplishments, but suffice to say—"It's been a good year." Our Woman's Auxiliary should be as proud (as is The Council) of its own accomplishment!

Contact with Governmental Agencies

An important activity of the Michigan State Medical Society continues to be necessary contacts with federal, state, and local governmental agencies. The most significant contacts made during the past year were:

1. Michigan Day in Washington, D. C. Again, MSMS representatives visited Washington, D. C., on May 1, 1956, pursuant to instructions of the 1955 House of Delegates, to make personal contacts with our friends in the Capitol and in the administrative offices of the federal government, with resulting increase in good will.

A recommendation on this subject follows.

2. Pleasant contacts with the State Executive Office in Lansing were maintained as the result of the creation last year of a Liaison Committee with the Governor. The following matters were subjects of discussion: (a) Nominations for the Michigan State Board of Registration in Medicine; (b) MSMS representation for the Governor's Study Commission on Prepaid Hospital Care Plans—the subject of serious discussion at four meetings of The Council and its Executive Committee; (c) Doctor availability; (d) Hospital facilities; (e) Medical education and the necessity for additional facilities in Michigan; and (f) MSMS opinion on health proposals which the Governor placed before the 1956 Legislature.

3. Michigan State Board of Registration in Medicine. E. C. Swanson, M.D., of Vassar, was appointed Secretary of this Board during the past year. He immediately requested the appointment of a liaison committee from the Michigan State Medical Society to advise him on problems concerned with medical practice; the Committee was appointed and several productive meetings have been held. One of the subjects considered was annual registration of doctors of medicine by the Michigan State Board of Registration in Medicine. According to Secretary Swanson, thirty-eight states have such a system which has proven beneficial.

The Council respectfully requests the House of Delegates to consider this question: Shall the Michigan State Medical Society favor or be opposed to annual registration of doctors of medicine. (A bill presented to the 1956 Michigan Legislature to inaugurate annual registration of M.D.'s was not pressed for action, pending decision by the Michigan State Medical Society House of Delegates.)

4. Liaison with the Michigan Commissioner of Health continues to be frequent, with Commissioner A. E. Heustis, M.D., being invited to all meetings of The Council and of its Executive Committee to report and discuss interesting factors and problems of mutual interest in the field of preventive medicine.

5. Recently, the Veterans Administration "Home Town Medical Care Program" was ordered cancelled as of July 1, 1957. A protest was made by the Michigan State Medical Society et al which sent representatives to Washington, D. C., to meet with Veterans Administrator H. V. Higley and Medical Director Wm. S. Middleton, M.D. After several months' negotiations, The Council is happy to advise, that, through the personal intercession of Administrator Higley, the "Home Town Medical Care Program" is to be continued, so far as Michigan is concerned. The congratulations and thanks of the Michigan State Medical Society have been dispatched to Administrator Higley for his judicious decision in this matter—his ruling insures that veterans in Michigan are given the best of medical care in their own localities. The Council also expresses gratitude to the veterans organizations of Michigan for their support of the MSMS in their stand.

6. Group Medical Care Enabling Act. Attorney General Thomas M. Kavanagh delivered an opinion on April 18, 1956, that Section 8 of Act 108 of the Public Acts of 1939—under which Michigan Medical Service is organized—which requires that "the majority of directors shall be at all times persons approved by the officers of the medical profession duly organized to promote statewide the science and art of medicine"—is "uncertain, indefinite, and vague, and therefore inoperative." The MSMS attitude toward the recent suggestion of some segments of the UAW-CIO to start a medical service plan of its own should be one of watchful waiting.

7. The usual number of beneficial contacts were maintained during the past year with the University of Michigan (which in April announced its plans for the physical examination of medical students by their family doctors); Wayne State University College of Medicine; Ferris Institute; Michigan Crippled Children Commission—which sought the advice of MSMS on numerous medical problems: Michigan Social Welfare Commission; Michigan Department of Insurance; members of the United States Congress; and members of the Michigan Legislature (see paragraph on Public Relations and Legislation).

Contacts with Voluntary Agencies and Organizations

1. Newly elected officers of Michigan Medical Service during the past year included Wilfrid Haughey, M.D., Battle Creek, President, and L. Fernald Foster, M.D., Bay City, Vice President. Michigan Medical Service continues to enjoy great success in its 16th year of existence. Financial reports of Michigan Medical Service will be submitted to its Members at their Annual Meeting of Tuesday, September 25, 1956, 2:00 p.m. in the MMS Headquarters, 441 E. Jefferson Street, Detroit. President Haughey urges all MSMS Delegates (who *ipso facto* are Members of Michigan Medical Service) to be present at this session to insure a quorum necessary for the conduct of business, and to learn more about the corporation entrusted to them in behalf of the public. This information is what the medical profession and the people desire to know.

At the request of Michigan Medical Service, a special MSMS "Committee on Michigan Medical Service" was appointed during the past year to advise on medical problems facing the Michigan Medical Service administration. This Committee considers recommendations of both doctors of medicine and subscribers to Michigan Medical Service.

A full page advertisement entitled "What is the Difference Between Blue Shield and Blue Cross" was placed in the *Detroit Free Press, Detroit Times,* and *Detroit News,* the *Grand Rapids Herald, Grand Rapids Press,* and the *Lansing State Journal* on April 22, during Medical Education Week.

2. Closer liaison with the State Bar of Michigan was effected during the past year with the creation of a joint committee which held two meetings to draft an interprofessional guide between the medical profession and attorneys.

3. The Hospital Relations Committee, with representatives from the Michigan State Medical Society and the Michigan Hospital Association, held several meetings during the past year to discuss problems mutual to both the medical profession and the hospitals of this state.

4. Favorable liaison also exists between the Michigan State Medical Society and the Michigan State Nurses Association—the Detroit Division of the MSNA cosponsoring with MSMS the Operating Room Supervisors Conference held coincident with the Michigan Clinical Institute; Michigan Health Council; Michigan State Medical Assistants Society—which was active in organizing the American Association of Medical Assistants at the organizational meeting in Kansas City last November;

the Michigan Tuberculosis Association; the Student AMA, et cetera.

5. Too numerous to mention are the voluntary organizations which invited the Michigan State Medical Society to name representatives to their boards and committees or at their meetings and conferences during the past year. The Council expresses its sincere thanks to all MSMS members who sacrificed valuable time and effort to act as official MSMS representatives to these many organizations.

Beaumont Memorial Restoration

Additional furnishings for the Beaumont Memorial—particularly for the store—were obtained during the past year. The State Society is especially grateful to Mrs. Carroll Paul of Marquette for her interest and tangible help in making this museum more attractive; also to the Michigan Historical Commission and Lewis Beeson, Executive Secretary of the Commission, for valuable advice and guidance in developing the Beaumont Memorial as a great historical shrine.

To reimburse the Michigan State Medical Society for its financial help in building the Beaumont Memorial, the sum of $9,099.29 is needed. Less than 50 per cent of MSMS members have contributed to the building of the Memorial—an architectural and historical gem which belongs to all members of the medical profession and should be the financial responsibility of all practitioners.

A recommendation on this subject follows.

Committees

A total of eighty-eight meetings of Committees of the Michigan State Medical Society and of The Council were held during the past year (up to September 1, 1956).

These active groups continue to be the backbone of the progress of the Michigan State Medical Society. The Council commends to the careful perusal of all MSMS members the annual reports of all committees. It expresses true gratitude to the chairmen and members of these committees for their great and unrewarded contributions of time and effort given on behalf of all MSMS members—for the benefit of Medicine and the public of Michigan.

Especially active during the past year were the following committees: Child Welfare Committee; Geriatrics Committee; Committee on Michigan Medical Service; Health and Accident Insurance Policy Control Committee; Legislative Committee; Mental Health Committee; National Defense Committee; Permanent Conference Committee; Rheumatic Fever Control Committee; Rural Medical Service Committee; Committee on Study of MMS Fee Schedules, and Maternal Health Committee.

The Arbitration Committee, which deals with the Uniform Fee Schedule for Governmental Agencies (which has not been revised since December 1, 1949) met frequently during the past twelve months.

A recommendation on this subject follows.

The Committee on Welfare Package Deals. This Committee was recently created to study various plans currently in practice in many counties of Michigan for the medical care of welfare and medically indigent patients. From data supplied by the component county societies, this Committee hopes to ascertain—purely for study purposes—how much is paid, how payment is made, and if each county society is satisfied with the relative equity of its own arrangement. This study of various arrangements in existence in Michigan will be valuable and helpful information.

Annual Reports of Committees of The Council

To save the time of House of Delegates' Reference Committees, the Annual Reports of Committees of The Council are being integrated into the Annual Report of The Council—a pattern that was successfully inaugurated last year:

Liaison Committee with Michigan State Pharmaceutical Association.—No problems have arisen during this year that required a meeting of this Committee. Some members of the Committee assisted in the classification of a related problem involving the Michigan State Pharmaceutical Association, the State Board of Pharmacy, the Michigan State Nurses Association, and Michigan Hospital Association.

Permanent Conference Committee with Michigan Hospital Association, Michigan League for Nursing, and Michigan State Nurses Association.—The Permanent Conference Committee has held regular meetings which have been well attended not only by our members but the members from the other component groups. Some of the major problems which were discussed follow:

1. Recruitment of Medical Record Librarians
2. Hospital Pharmacy Operation
3. Psychiatric Nursing
4. Patient Care
5. Defense Aid Mobilization
6. Nurse Aid Training Programs
7. Current Legislation
8. Blue Cross-Blue Shield Problems
9. Rehabilitation Programs

It is pleasing to note that this Committee has made definite progress during the years of its existence. All component organizations are much closer together and the attitude of all the representatives is very cooperative. Most problems are common to all groups and we all benefit through thorough discussion of all viewpoints.

Committee on Awards.—During the past year, the Committee on Awards has carefully reviewed possibilities for public recognition by the Michigan State Medical Society of outstanding work done in behalf of the health of the people of Michigan and the medical profession.

As a result, we have during the past year recommended the citations noted below. These recommendations were formally approved by The Council and were publicly presented.

At the 90th Annual Session of the MSMS:

1. James Gerity, Jr., Adrian, President of WNEM-TV, Bay City, for distinguished service in public education through the medium of television.
2. Jean Worth, Escanaba, Editor of the *Escanaba Press,* for distinguished contribution to public understanding of Medicine and Health.
3. Wilfrid Haughey, M.D., Battle Creek, Editor of The Journal of the Michigan State Medical Society, in appreciation for many years of dedicated service.

At the Michigan Clinical Institute:

1. Robert L. Novy, M.D., of Detroit, President of Michigan Medical Service (Blue Shield) for fourteen years until last July, received mementoes from both Blue Shield and MSMS.
2. Nine MSMS members serving as presidents of national medical organizations.
3. Frederick F. Yonkman, M.D., Summit, New Jersey, Vice President of Ciba Pharmaceutical Products, Inc., honored jointly by MSMS and the Michigan State Pharmaceutical Association as official representative of the drug manufacturing industry.
4. The MSMS Award for Excellence in Medical Reporting, top honor in the news field, went to the *Detroit Free Press,* represented by Managing Editor Frank Angelo, with a supporting award to Mrs. Jean Pearson, *Free Press* science writer.
5. Distinguished Health Service Awards were presented to: John Wurz, Editor of *The Grand Rapids Herald;* the *Lansing State Journal;* the *Muskegon Chronicle;* WJBK and WJBK-TV, Detroit; WPAG and WPAG-TV, Ann Arbor; WKZO and The Drug Shop, Kalamazoo; WHFB and Gillespie's Drug Store, Benton Harbor-St. Joseph, and The Upjohn Company, Kalamazoo.

Although not within the scope of this Committee's responsibility, the Committee nonetheless recognized with pleasure: the election of Walter H. Winchester, M.D., as Michigan's Foremost Family Physician of 1955; the 18 MSMS members representing 900 years of Medical Service, who were presented with the Fifty-Year Award this year; the Biddle Lecturer, Dr. Charles L. Anspach, Mt. Pleasant, President of Central Michigan College of Education, and the Annual Beaumont Lecturer, Garnet W. Ault, M.D., Washington, D. C.

Committee on Courses on Medical Economics and Ethics.—The full Committee met on August 26, 1955, to prepare the outline of the subjects to be presented for the following year, and the minutes of this meeting were accepted by The Council on September 25. During this meeting the work of the previous year was reviewed and a program developed for the following year. It was suggested that the Chairman write up a synopsis of each talk so that the students would have a little better idea of what the subject was about. This was done and some of the lectures were combined so that twenty subjects were presented for consideration along with a brief abstract of what would be covered in the talk. Eighteen of these subjects were selected and presented.

July 6, 1955: "Medical Public Relations"—Dr. R. W. Teed. This lecture covered briefly the whole field of medical public relations including the fundamental personal factors of the physician, public relations of the office level, at the county society level, at the state and national levels. It was intended only as a brief review of the entire problem.

July 13, 1955: "Practice in a Small Community"—Dr. J. S. DeTar of Milan. This lecture covered some of the conditions seen by the practitioner in the small community, his equipment and his methods of operation.

July 20, 1955: "The Doctor Draft"—Captain Brunk of the State Selective Service Administration. Captain Brunk gave a review of the selective service law and its application to physicians.

October 5, 1955: "Physician Placement in Michigan"—Mr. E. H. Wiard, Executive Secretary of the Michigan Health Council, Lansing. Mr. Wiard gave a review of the work of the M.D. placement program which was transferred from the Michigan State Medical Society to the Michigan Health Council two years ago and has been under the partial sponsorship of the Upjohn Company of Kalamazoo. He reviewed the work which has already been done and acquainted the students with the facilities which are available whenever they are ready to go about the business of selecting a place to practice.

November 9, 1955: "The Relation of the Physician to the Legislature"—Dr. L. A. Drolett, Chairman of the Legislative Committee, MSMS. Dr. Drolett reviewed the work of the Legislative Committee of the MSMS along with that of the Public Relations Department in dealing with the rather large number of bills with medical interest which are annually presented to the Legislature. He pointed out that approximately 10 per cent of all bills presented have medical interest. He stressed the need of the physicians to take an interest in the legislators of their home districts in order to advise them adequately on medical matters in relation to law.

November 16, 1955: Open session of the Ethics Committee of the Washtenaw County Medical Society.—On this day the Committee held what was essentially an open session, several applicants for membership being present. It is a requirement of the Washtenaw County Medical Society that each member meet with the Ethics Committee for an indoctrination and the students were thus able to see what actually goes on at such a session.

November 16, 1955: "Rural Practice Can Be Fun"—John R. Rodger, M.D., of Bellaire. Talk to the sophomores. In giving the talk, Dr. Rodger attempted to answer three questions: 1. Can I practice good medicine in the community? 2. Will I make a decent living there? 3. Will I and my family enjoy living there? The talk also covered the co-operation of the family physician and the specialist, and the service that the specialist in the trading center gives to the rural physician in that area.

November 23, 1955: "The Relation of the Physician to Other Practitioners"—Dr. M. R. Weed of Detroit. Dr. Weed reviewed the various problems which periodically arise with other practitioners, especially in connection with refer consultations, etc., and suggested acceptable methods of carrying out these procedures. He also discussed briefly the technical consideration in contacts involving cultists.

December 7, 1955: "Self Policing of the Medical Profession"—Dr. James Blodgett of Detroit. Dr. Blodgett described the operation of the various means of self policing in the profession such as (1) the surgical audit society, (2) the medical audit committee of the hospital, and (3) the tissue committee of the hospital. By these means the profession is attempting to not only keep its own house clean but to improve the standards of the practice in the entire State of Michigan.

January 4, 1956: "The Program of the Michigan State Public Relations Department"—Mr. Hugh W. Brenneman and Mr. DeWitt Brewer. This program was handled very nicely with one speaker covering one subject and then the other taking over for another subject. The alternately changing voices definitely increased the listening appeal and the students were given a clear picture of what the MSMS is attempting to do along the lines of public relations. Stressed also was the need of good public relations at the office level.

January 11, 1956: "Office Records"—Dr. R. W. Teed. On this date a storm prevented the appearance of the scheduled speaker and the Chairman filled in with the methods of keeping accurate and adequate office records.

January 18, 1956: "Medical Ethics"—Dr. Glen Coan of Wyandotte. Dr. Coan is a member of the Ethics Committee of the Wayne County Medical Society. He presented cases that had been reviewed by the Committee and pointed out how difficulty could have been prevented.

February 1, 1956: "Starting a Practice"—Dr. Warren Mullen of Pentwater. Dr. Mullen who started practice only a short time ago still has in mind the problems entailed in such a venture and described these very clearly to the students.

February 20, 1956: "The History, Philosophy and Proper Utilization of Blue Cross-Blue Shield"—Dr. L. Fernald Foster of Bay City. Dr. Foster gave a brief review of the history of the facts which led to the adoption of Blue Cross-Blue Shield in Michigan and pointed out that although the present generation knows nothing of these problems, the heritage which has been left by farsighted men of the past should not be accepted as a matter of course. The philosophy also behind the adoption and continued co-operation of Blue Shield was outlined, and some of the factors concerned in utilization were also discussed. He pointed out that it was the responsibility of the medical profession to make sure that Blue Cross-Blue Shield were kept solvent since they represent the major answer of the profession to the socialization of medicine.

March 14, 1956: "Health Coverage of the Community"—Dr. Hugh Robbins of Battle Creek. Dr. Robbins reviewed the routine operations of the health department and pointed out the responsibilities of the health department to the physician and vice versa.

April 4, 1956: "Problems of Veterans' Care"—Dr. William Bromme of Detroit. Dr. Bromme, who has been active in the study of veterans' problems of the MSMS, gave a review of this and pointed out reasons why the society is opposed to the further extension of non-service connected care.

May 2, 1956: "The Development of a Fee Schedule"—Dr. Arch Walls of Detroit. Dr. Walls reviewed the factors concerned in the running of a medical practice and discussed both the practical and philosophical aspects of the development of a fee schedule.

May 16, 1956: "Approaches to Health Coverage for the Public"—Mr. Jay Ketchum, Executive Vice President of Michigan Medical Service. Mr. Ketchum described not only the coverage of Blue Shield but also other approaches to the problem such as the closed panel, union clinics, socialized medicine, et cetera.

May 23, 1956: "Provincialism and Economic Realism"—Dr. Jackson Livesay of Flint. Dr. Livesay pointed out that while physicians make a good living and are entitled to this, there is a certain sense in which this prosperity can be flaunted before the public and a bad public relation result. He pointed out methods of obviating this fault.

In addition, the Committee arranged a court demonstration in co-operation with Professor Charles Joiner of the University of Michigan Law School, and since the students stated they would prefer to have some of their own members take part in this activity the matter was turned over to them. However, in the shuffle the contact was lost, and no demonstration was put on.

The Chairman would like at this time to commend and thank all members of the Committee for their aid and suggestions in working out this program. He would also like to express profound gratitude to all of the men who co-operated in presenting the lectures. He would like to point out that during the past four or five years he has been in charge of the program that not one single member of MSMS has refused to accept his duties. In all cases it represented an interruption in the physician's busy practice and a considerable expenditure of effort since many of the men came from considerable distances. Obviously, the programs could not have been put on without this co-operation, and the Committee recommends that The Council find some way of expressing appreciation for the work of these men.

Arbitration Committee.—The Committee on Arbitration attempts to advise fair, equitable and uniform fees for certain medical services rendered to Governmental Agencies. As of the present date, the Committee has had three meetings and reviewed forty cases, including four cases which were held in abeyance from the 1954-55 meetings. Judging from past experience, we will have about two more formal meetings before the close of the year.

Committee on National Defense.—The most important business taken up by the Committee in the past year concerned the establishing of a full-time National Defense Medical Office in the Department of the State Board of Health. Doctor Heustis, Director of the State Board of Health, is the representative in the State National Defense Organization. It is felt that the doctors and other medical personnel should have someone in that office who can take care of the correspondence and the correlation of the other departments throughout the state in this work. As it is, we have meetings which are constructive and instructive but no central office through which the work can be executed.

Liaison Committee with Michigan Veterans Organizations.—The Chief Medical Officer of the Veterans Administration indicated in October, 1955, his intent to discontinue the Michigan Home Town Care Program for Veterans on July 1, 1957. Strong representations made before V. A. Administrator by a group representing the MSMS, Michigan Veterans organizations and the Michigan Congressional delegation produced, on May 18, 1956, an announcement of reversal of this position. Accordingly, the Michigan Home Town Care Program has been granted a continuation for an indeterminate period. It was not necessary to utilize the Liaison Committee for this project.

Committee on Atomic and Allied Procedures.—During the past year this committee has had no official meeting. Several members have met informally for discussion of matters which might properly come before this group. Our conclusions might be summed up as follows:

(1) At the time this committee was organized, there was a definite need for a broadly representative group to correlate and evaluate the data on the uses of atomic energy both constructively and destructively.

(2) During the years the destructive effects of mass radiation together with methods for protection and control have been taken over by Civilian Defense.

(3) The medical uses of the atom are now being effectively explored and evaluated through the several radiological societies and the Society for Nuclear Medicine.

We feel that it would be quite proper, at this time, to discontinue this committee. It could well be reappointed at some future date should the necessity arise.

Medical Procurement Advisory Committee.—This committee held no meetings during the past year since no problems arose which called for a meeting and no references were made by officers or committees of the Society which required consideration.

However, various members of the Committee have served in various capacities in medical procurement. Dr. Grover C. Penberthy continues as Chairman of the Voluntary Advisory Committee to the Selective Service System and your Chairman as Medical Advisor to the Director of Selection Service for Michigan.

Special Committee to Meet with Michigan Department of Social Welfare.—As in the past five years, this Committee has formed the major part of a larger Advisory Committee under the chairmanship of Milton Shaw, M.D. We have met at the call of the Director of the Welfare Commission a total of five (5) times since September, 1955. Various problems were studied and recommendations made, including reappraisal of the Totally Disabled and Aid to Dependent Children Categories; the adaption of "actual cost" medical care in all counties; possibility of dental care for A.D.C. cases; and many other important matters.

The Social Welfare Commission has again thanked this Committee for its valuable contributions and respectfully requests a continuation of the same in the future.

Committee on Blood Banks.—There have been no specific meetings of the Committee on Blood Banks of the Michigan State Medical Society since 1955. However, since that time members of the Committee have been working on the Constitution and By-laws of the Michigan Association of Blood Banks and we have become incorporated in the State of Michigan. We are now in the midst of a membership drive and the response is very favorable.

The annual meeting of the Michigan Association of Blood Banks was held jointly with the meeting of the Michigan Pathology Society in East Lansing on May 5, 1956. At that time the officers elected were: R. L. Mainwaring, M.D., president; E. R. Jennings, M.D., vice president; and Joseph A. Kasper, M.D., secretary-treasurer. The Association felt that since it is young and growing, the officers who presided last year should be kept over for the coming year.

During this year, we plan on having a scientific program on November 3, at which time papers will be presented discussing technical and administrative aspects of blood banking.

Hospital Relations Committee.—The activity of the Hospital Relations Committee for 1956 was confined to a joint meeting with a committee of the Michigan Hospital Association. Considered discussion centered around the principles adopted in 1953 by official bodies of the American Medical Association, and the American Hospital Association seemed to adequately cover the relationship between the Michigan State Medical Society and the Michigan Hospital Association. These principles are as follows:

1. The general purpose of hospitals and physicians is to aid each other in the delivery of the best possible medical care to patients. To attain such a purpose requires full co-operation among medical staffs, governing boards and administrative heads of hospitals. One important method of attaining this objective is that duly designated representatives of the medical staff shall have

free and direct access to the governing board with due consideration to the position of the administrator as chief executive officer of the hospital. The various methods by which the medical staff may have access to the hospital governing board follow. These methods are not listed in the order of their desirability, and there may be other acceptable liaison plans developed depending upon local conditions.

(a) The executive committee of the medical staff and a committee of the governing board with the hospital administrator can serve as a joint committee.
(b) Representatives of the medical staff can serve as members of the medical staff committee of the governing board with the hospital administrator.
(c) Representatives elected by the medical staff can attend meetings of the hospital governing board.
(d) Members of the medical staff can be members of the hospital governing board.

2. The professional evaluation of chiefs of service and members of the medical staff should be the responsibility of the medical profession. The method of selection of these individuals must be subject to local arrangement and local conditions. In any such arrangement, however, the principle of the freedom of the staff to make recommendations, subject to the approval of the hospital governing board, should be recognized.

3. The medical profession and the hospitals recognize that certain special services, such as anesthesiology, pathology, radiology and physical medicine, are integral parts of the practice of medicine and of the services necessary for hospital patients. Physicians in these fields should have the professional status of other members of the medical staff. Chiefs in these specialties must assume also the administrative responsibilities and relationships customarily associated with such positions.

4. THE RIGHT OF AN INDIVIDUAL TO DEVELOP THE TERMS OF HIS SERVICES ON THE BASIS OF LOCAL CONDITIONS AND NEEDS IS RECOGNIZED, BUT SUCH CONTRACTUAL ARRANGEMENTS SHOULD IN ALL CASES ENSURE (A) THE POLICY OF PROFESSIONAL INCENTIVE FOR THE PHYSICIAN, AND (B) PROGRESSIVE DEVELOPMENT OF THE HOSPITAL DEPARTMENTS INVOLVED, IN ORDER THAT INCREASINGLY IMPROVED SERVICES TO PATIENTS MAY BE RENDERED. MOREOVER, A PHYSICIAN SHALL NOT DISPOSE OF HIS PROFESSIONAL ATTAINMENTS OR SERVICES TO ANY HOSPITAL, LAY BODY, ORGANIZATION, GROUP, OR INDIVIDUAL, BY WHATEVER NAME CALLED, OR HOWEVER ORGANIZED, UNDER TERMS OR CONDITIONS WHICH PERMIT EXPLOITATION OF THE PATIENT, THE HOSPITAL OR THE PHYSICIAN.

5. The chief of a hospital department may have access to financial information regarding his department.

6. It is desirable that means should be provided at local, state and national levels for review of problems of individual hospital-physician relationship by organized medical and hospital groups.

Committee to Study Closed Panel Practice.—The Society year, 1955-1956, has been a lean one for the Closed Panel Practice Committee as they only have had an opportunity for one meeting in January, 1956.

At this meeting, some of the aims planned were discussed and assignments were given to various members to investigate as fully as possible the various Closed Panel Plans now in vogue throughout the country; principally, the Health Insurance Plans of Greater New York, The Permanente Plan in California, the various Palo Alto Plans, and The Ross-Loos Plan in Los Angeles, as well as the plans of individual physicians, and various union groups.

One of the members propounded as a basic premise the following questions: What does the public want? What does the medical profession want? What do the labor unions want? We will try to answer these questions.

The Chairman, on a recent trip to California, investigated most of the California Plans, and is going to report these at the ensuing meeting, which we hope will be held shortly.

Committee on Study of Prevention of Highway Accidents.—The Committee had three meetings this past year, plus considerable work by many Committee members outside the time of meetings.

School Bus Driver Examination: The Committee has prepared an outline of a physical examination for school bus drivers, who at the present time do not need anything more than a chauffeur's license to qualify. This outline will be distributed to schools by the State Department of Public Instruction as a suggested outline for school boards to require their school bus driver applicants to pass.

High School Driver Training Legislation: The Committee actively supported the resolution adopted by the MSMS House of Delegates last September urging the Legislature to adopt a driver training law, and had contacts with the Governor and legislators on this subject. Some of the Committee's arguments received editorial comment in the *Detroit Free Press.* Michigan now has probably the most outstanding driver training legislation in the country. At the Traffic Safety Conference held in Chicago in May, this program received more comment than anything else Michigan has done traffic-wise.

Highway Safety on Extramural Programs: Dr. John Sheldon, Chairman of the Extramural Postgraduate Education Committee, met with the Traffic Committee for a mutual discussion of this problem. It was moved that two two-man teams be provided for possible use in the extramural programs this fall to discuss different aspects of the treatment of highway accidents.

Local Medical Society Traffic Committees: Several local medical societies have formed traffic safety committees after this suggestion was made by the MSMS Committee by way of the Secretary's Letter.

MSMS Activities at AMA Level: The following resolution was initiated by the Committee and introduced by the Michigan Delegation at the December meeting of the AMA and was passed unanimously: "That the American Medical Association through its House of Delegates strongly urges the President of the United States to request legislation from Congress authorizing the appointment of a national body to approve and regulate safety standards of automobile construction." This resolution was referred by the AMA to the President's Committee on Traffic Safety.

The Chairman of the Committee introduced a resolution by way of the MSMS House of Delegates and the Michigan delegation to the AMA calling on the AMA to form a committee for the study of highway accidents. This resolution was passed and such a committee has been formed and was responsible for a fine traffic safety scientific exhibit at the June AMA meeting in Chicago, as well as for a half day program at one of the general sessions. Dr. Claire Straith, member of the MSMS Committee, was responsible for one of the exhibits.

A letter was drafted by the Committee and sent in the name of MSMS to Mr. Harlow Curtice, Chairman of the President's Committee on Highway Safety, urging that the AMA be made a member of the Advisory Council to the President's Committee. This has been done.

The Chairman of the Committee, as a member of Michigan's AMA delegation, appeared before the AMA reference committee considering both of the above mentioned resolutions last November, and also before the reference committee considering a Georgia State Medical Society's resolution on traffic safety at the June meeting of the AMA. At his suggestion the reference committee amended the latter resolution to suggest that some time soon the AMA call a nationwide conference to consider the medical problems of highway safety, with emphasis being placed on urging individual state medical societies to initiate traffic safety committees. As a result of this the Chairman of the AMA Traffic Study Committee has asked the MSMS Committee to prepare a tentative program for such a meeting.

Regional Traffic Safety Conference in Chicago: This was called by the President's Committee on Traffic Safety. The MSMS Chairman attended by appointment of MSMS President Jones. Three other of the 153 members from Michigan were physicians, representing the Michigan Committee on Trauma. The Conference was called to focus attention on the value of state and local safety councils. with Minnesota's experience as a state and Muskegon's as a small city as examples. The Michigan delegation elected a temporary Action Committee on Traffic Safety to call upon the Governor, of which the Chairman is a member.

Local Medical Society Participation in Safety Councils: The Committee urges that county societies should be alerted to cooperate with local safety councils, and should help to initiate them in areas where they do not exist.

The Chairman would like to thank the very busy members of this Committee for their untiring efforts and wonderful cooperation. No MSMS Chairman could have a better committee!

Committee on Study of Basic Science Act.—The 1955 Legislature of Michigan amended the Basic Science Law in such a way that the Michigan Board of Basic Science Examiners was granted more discretionary powers, and the law itself considerably liberalized. Briefly, the changes in the law were as follows:

1. The passing grade of the Basic Science Examination was raised from 70 to 75 per cent.
2. Substituted the phrase "substantially equal to" for the previous wording of "as comprehensive and exhaustive" as a means of comparing the Basic Science examinations of other states with that of Michigan.
3. Placed upon the applicant the responsibility of producing a copy of his examination before the licensing board of another state, and a certified copy of answers if available.
4. The Board was given the power to accept examinations given by any legally constituted licensing board in ANY state or territory, in ANY of the healing arts, if comparable to the examination of the Michigan Board, for the purpose of granting waivers in lieu of the Michigan examination.

The passage of the 1955 amendment had certain effects that were immediately apparent as shown by the table below:

Certified by Waiver

January 1, 1953 to November 1, 1954	116
November 1, 1954 to May 1, 1956	335

It should be noted that previous to 1954. waiver was possible with only one state because of the Attorney General's opinion. In 1954 waiver was possible with eleven states (after amendments by the 1954 Legislature) and in 1955 seventeen states were acceptable for waiver after amendment.

The number of applicants who desired certification in Michigan continues to show some increase. As more applicants are certified by waiver the number of examinations would naturally decrease. This is indicated by the fact that only 130 applicants wrote the examination in February, 1956. For the previous three years the numbers writing the examinations were as follows:

1953	600
1954	657
1955	640

Two hundred and thirty-five applicants wrote the examinations May 11 and 12, 1956.

According to the figures of the Basic Science Board of Examiners, the rate of failures is fairly constant at approximately 15 to 18 per cent, and the same Board also reports that certificates are granted to applicants from the various healing arts as follows:

	Per Cent
Board of Registration in Medicine	86 to 87
Osteopathic Board of Registration	12 to 13
Chiropractic Board	2

In general the status of Basic Science in Michigan as compared to other states may be summarized as follows:

1. Michigan has waiver with seventeen of the twenty-one states having Basic Science Laws. The four states in which waiver is not possible give examinations which are not "substantially equal" and therefore unacceptable to the Michigan Board. For example, the Florida examinations were considered as very elemental. No questions in bio-chemistry were given, the questions being equivalent to high school inorganic chemistry.
2. The Basic Science Law has not been repealed recently in any state.
3. The numbers of states having Basic Science Laws remains constant at twenty-one.
4. There have been some changes in the basic science laws enacted in other states, for example, Washington and Oregon, who formerly examined in four subjects. have now added a fifth.

COMMENTS

The Basic Science Law in Michigan seems to be serving the purpose for which it was enacted, that of keeping out substandard healers. If there is any misgiving regarding osteopaths, it should be borne in mind that the educational standards of the osteopathic schools of medicine have been on the up-grade and their recent graduates should be well able to pass the basic science examination. The same is not true of the chiropractors. High school education only is required of basic science applicants.

The present laws permit the granting of waivers on examinations given by ANY of the legally constituted boards of licensure in the healing arts from ANY state or territory. It includes osteopathic and chiropractic boards along with state boards of medical licensure. There is always the potential danger that the granting of waivers on such a wide basis may eventually tend to lower the standards of medical practice in Michigan. This is a possible trend that we can only observe at this time.

Some state boards refuse to send examination questions for evaluation, even medical boards. This may be a source of difficulty for some applicants. In the past, even the Michigan Board of Basic Science Examiners could not procure examinations from some states for use in comparative evaluation.

There have been expressed some misapprehensions that the present status of basic science in Michigan acted to penalize our own graduates of medicine within the state. However, we have been informed that most Michigan medical students take the basic science examination at the end of their second year in medicine, when basic sciences are fresh in mind, and are encountering very little, if any, difficulty.

There is one far-reaching possibility that basic science legislation, standing in the way of substandard practitioners, may have a salutary effect in raising the standards of practice in healing arts outside of medicine.

CONCLUSIONS

1. The effect of the 1955 amendments by the Legislature has been to grant increased discretionary powers to the Basic Science Board of Examiners. and to liberalize the law considerably.
2. Michigan has waiver privileges with seventeen of the twenty-one basic science states.
3. The Basic Science Law has been amended in 1953, 1954 and 1955. It would seem inadvisable to seek further changes in the law at present as it is apparently serving the purpose for which it was enacted, that of keeping out substandard healers.
4. We believe the Committee on the Basic Science Law should be continued to review any proposed changes to this law and to review the status each year for the House of Delegates.

Committee to Study Periodic Health Examinations in Hospitals—There has been no meeting of this Committee in 1956. Statistics compiled in 1955 indicated there

were eight hospitals in Michigan conducting these examinations for persons other than their own employes.

County societies are requested to report to MSMS how these examinations are managed in their areas.

Joint Committee with State Bar of Michigan.—This Committee was appointed by The Council to formulate an interprofessional code with the State Bar of Michigan and has had two meetings.

Several other interprofessional codes or articles of agreement were discussed and investigated, namely from Wisconsin, Cincinnati, and Minnesota. The advantages and disadvantages of these various plans were discussed, and ideas from both the legal and medical members of the Committee were added to the discussion. The State Bar representatives on the Committee were strongly of the opinion that they had been directed to help draft standards only, and not to devise punitive measures.

A motion was made at the last meeting that a subcommittee composed of one representative from each of the two professional groups be appointed to study the various plans now being used elsewhere with regard to medical testimony and to prepare in draft form a statement of principles suited to the State of Michigan; this draft to be submitted to each member of this joint Committee for consideration, suggestions, and improvement. This motion was carried.

The Committee, Dr. MacMillan and Mr. Vandeveer, was appointed and will report later.

Mediation, Ethics and Grievance Committee.—This Committee has had two meetings, the first of which dealt with consideration of the problems involved. The second meeting concerned discussion of the definition of the terms "mediation," "ethics" and "grievance."

A third meeting was held, when a summation of the problems and definite recommendations were formulated for presentation to the House of Delegates in a form suitable for incorporation in the By-Laws.

A recommendation on this subject follows.

Liaison Committee with State Executive Office.—This committee thought that its function should be to discuss with the Governor matters in certain fields of common interest in those areas of public welfare in which both the Governor's office and the Michigan State Medical Society have particular interest—not in those instances where problems lie within the purview of only one or the other.

With this in mind, the Committee recommended that a letter be dispatched to the Governor stating that we are glad to meet with him or his representatives for discussion of mutual problems.

Study Committee on Fee Schedules for Michigan Medical Service.—The Fee Schedule Committee met five times and carried out the two assignments given it by the 1955 House of Delegates of the MSMS. The first assignment was to draft a fee schedule for a $6000 Michigan Medical Service family income service contract which the Ford Motor Company and the UAW-CIO had agreed to have and had requested of Michigan Medical Service. The second assignment was to develop an ethical and legal method for division of the scheduled fee of Michigan Medical Service between physicians.

The questionnaires received from every member for suggested fees and the questionnaires from the following groups, General-Board and non-Board, Specialists-Board and non-Board and Specialty Societies were gone over in great detail, each item being considered individually. The Committee attempted to fix fair and reasonable fees both for the participating doctors and the policy holders. The fee schedule as developed was submitted to The Council of the MSMS for its consideration.

The following motion was adopted by the Committee (with three dissenting votes—Doctors Hansen, Osius, and Wellman) re MSMS House of Delegates resolution on division of the scheduled fees of Michigan Medical Service and submitted to The Council of the MSMS:

> "Whenever more than one doctor of medicine actively and personally participates in any medical treatment of or surgical procedure on a patient for which a single fee is payable by Michigan Medical Service, the doctor in charge of such care shall specify in writing the portion of such fee which has been earned by the assisting or consulting doctors and inform Michigan Medical Service of the amount thereof.
>
> "Thereupon, the Michigan Medical Service shall be authorized to allocate and pay the respective portion of the scheduled fee directly to the participating doctors in accordance with such direction."

The Committee wishes to express its appreciation of the great amount of work done by many of the members of the Michigan Medical Service Staff and for their cooperation and advice. It would also be remiss if it did not thank Mr. William J. Burns and Miss Helen Schulte of the MSMS Headquarters Staff for their very able assistance.

Committee on VA Hometown Medical Care Contract.—The Michigan State Medical Society was notified by Dr. W. S. Middleton, Chief Medical Director of V.A., that the home town medical care program for veterans would be terminated July 1, 1957.

The Council recommended that the Michigan State Medical Society send a delegation consisting of Blue Shield Director John W. Castellucci, representatives of the Michigan State Medical Society, interested Congressmen and representatives of Veterans' Organizations to Washington to discuss with Mr. H. V. Higley and Dr. Middleton the benefits of retaining the present contracts with the intermediary (Blue Shield) in Michigan.

Health and Accident Insurance Policy Control Committee.—Four meetings of the Committee on Health and Accident Insurance Policy Control were held this year.

Request from a component society for comparison of the Michigan Policy with that of the Texas Medical Association was discussed and the information forwarded.

A new card for solicitation was developed for use by Provident's Michigan representative, Mr. Richard M. McDermott, who is now visiting MSMS members throughout the State to explain the MSMS Health and Accident Insurance Program and to offer his services.

Statistics: 544 claims have been received from November 15, 1953, to June 15, 1956: two claims have been paid for the full 104 weeks ($7,700 plus in each case); four accidental death claims have been paid, each approximating $3,500. Full information and statistics available to this Committee will be made public to all MSMS members, through an article in The Journal.

In view of the increasing number of potential prospects in Michigan for the MSMS Health and Accident Insurance Program, this Committee recommended that Provident augment the splendid efforts of Mr. McDermott by instituting a concerted drive during the balance of 1956.

Litigation and Legislation

1. Legal action of Wm. A. Kopprasch, M.D., of Allegan against MSMS, the Allegan County Medical Society, et al. This effort of Dr. Kopprasch to gain entrance into the Allegan Health Center of Allegan has been in the Circuit Court since January 13, 1955. The motion to particularize the plaintiff's bill of complaint, was argued by legal counsel in Allegan on April 26; subsequently, the judge ruled that Dr. Kopprasch's motion was indefinite, and hazy and that the plaintiff has been instructed to amend the complaint or his pleading will be stricken. A second motion was filed by MSMS for the same purpose, and it was granted.

2. Legislation in respect to cultists was discussed in detail by The Council at its July, 1956, Session. These discussions were transmitted to county society officers and MSMS Delegates and heard throughout the summer at Councilor District Conferences. The subject has been thoroughly aired to aid decision by the House of Delegates.

Matters Referred to The Council by 1955 House of Delegates

1. Last September, the House of Delegates recommended that component county societies of Michigan conduct polls of their memberships on the question of Old Age & Survivors Insurance Program "to determine as accurately as possible the consensus of the medical profession in this state, and that the result of his poll be presented to the House of Delegates at the 1956 Session."

As of July 1, returns on this poll were received as follows: Bay-Arenac-Iosco, Delta-Schoolcraft, Genesee, Gogebic, Grand Traverse-Leelanau-Benzie, Hillsdale, Houghton-Baraga-Keweenaw, Ingham, Ionia-Montcalm, Kalamazoo, Lapeer, Lenawee, Livingston, Marquette-Alger, Mason, Menominee, Muskegon, Northern Michigan, Shiawassee, Van Buren, Washtenaw, and Wayne.

2. Resolution recommending that a committee be appointed to investigate the workings of the California Cancer Commission and others now functioning, and to make recommendations concerning the advisability of organizing a Michigan Cancer Commission or to utilize existing committees for the purpose of investigating, evaluating, and exposing all so-called cancer cures that are presently known or may appear in the State of Michigan.

Pursuant to this resolution, The Council appointed a special Committee on Study of Cancer Quackery (Wm. A. Hyland, M.D., Chairman; E. T. Thieme, M.D., J. M. Wellman, M.D., and R. C. Hildreth, M.D.). This MSMS Committee recommended that it be integrated as a Committee on Cancer Quackery into the structure of the Michigan Cancer Coordinating Committee (representing the six Michigan agencies primarily interested in cancer control). This recommendation was approved by the MCCC which appointed the same personnel plus Don A. Johnson of Flint as its Subcommittee on Cancer Quackery. The Committee studied the California experience. Incidentally, only Michigan and California have Committees on Cancer Quackery.

The recommendations of the Committee on Cancer Quackery are:

(a) Each county medical society appoint a cancer committee to concern itself among other matters with the subject of Cancer Quackery; those county societies which do have a cancer committee should be urged to enlarge its scope to include a thorough knowledge of quackery and in cooperation with the national offices and local unit of the American Cancer Society to keep the members of the medical society informed of the current progress in cancer diagnosis and treatment. Further, to fully inform the public through radio and newspaper articles, talks and discussions, dissemination of literature and by word of mouth, concerning the danger of departing from the type and form of treatment recommended by the physicians and hospitals in their area.

(b) To further protect the patient, especially the advanced cancer patient, this Committee recommends that each hospital cancer committee review all advanced cancer patients, through the usual methods with the attending physician or physicians, who in turn will make known to the patient or family the opinion of the group as to the type and stage of the disease and what to expect—and to detail every safeguard at his or their command against the wiles and enchantment of the charlatan and his emissaries.

The weakness of the profession through which the quacks, take advantage is the very integrity of physicians —especially in advanced cancer—the admission by the profession that the cancer is advanced and there is very little to be done for the patient—this leaves the patient and family high and dry—therefore making it easy for the unscrupulous quack to enter the picture at a price, with his generous promises, at a moment when the patient and family are at a low ebb mentally due to the shocking information.

The patient who has a good chance for recovery is not of too great concern as to the possibility of falling into the hands of the quack. It is the advanced or terminal patient. However, the medical profession has much more to offer than the quack and in an honest manner—by a thorough explanation and not charging any great fee.

In such cases, we can institute chemo-therapy on a research and high moral basis—patients will gladly cooperate with the thought in mind of helping others and possibly themselves, especially when they realize the cost to them or their family is small. The quack cannot compete with this type of treatment or procedure.

Much has and is being done in research by the National Cancer Institute, American Cancer Society and others in chemo-therapy; the aid of these institutions is readily available as also the drugs they might recommend. Such help as this by the immediate medical resources who and which are known to the patient is the bulwark against the fraudlent practitioner.

(c) The Committee further recommends an editorial in The Journal of the Michigan State Medical Society on Quackery in Cancer.

(d) On the bi-monthly cancer page in the Michigan State Medical Society Journal, the Committee recommends frequent reference to quackery.

(e) The Committee recommends that county medical societies release to the daily and weekly papers in their area approved medical material on cancer quackery.

(f) The Committee recommends that this same material and knowledge be made available for local radio and television stations.

Further, the Committee suggests the Garland talk, "The Pursuit of the Unorthodox," presented to the American Cancer Society recently, be reprinted and distributed to all members of the Michigan State Medical Society if we are granted permission by the Medical Director of the American Cancer Society.

3. Resolution re possible optometric legislation. The Council has been alerted to the inherent dangers of such proposals, if introduced into the Michigan Legislature, and is ready to inform legislators as to the intent of such legislation, in order that the rights of the patient to complete care and examination by the licensed physician will not be jeopardized. A copy of this resolution was forwarded to the AMA Board of Trustees which answered, through Secretary George F. Lull, M.D., that the matter was being referred to the AMA Law Department which is at the present time making a study of optometric legislation.

4. Resolution re pollution of inland waterways. The Council urged the Michigan Department of Conservation to investigate this situation and take proper steps to eliminate any problems which may be disclosed. The Water Resources Commission of the State of Michigan, at its January 26 meeting, received the resolution and directed Milton P. Adams, its Executive Secretary, to acknowledge its receipt and express thanks for the MSMS offer of cooperation.

5. Resolution re screening of foreign interns. This recommendation was presented to the members of the Michigan State Board of Registration in Medicine. Secretary E. C. Swanson, M.D., replied December 19, 1955, that "the matter has been taken care of."

6. Resolution re periodic health examinations by hospital staffs. Copies of this resolution were sent to the Chairmen of medical staffs of accredited hospitals in Michigan, to members of the Michigan Industrial Medical Association, and to the secretaries of all county medical societies with an accompanying letter of explanation. The Committee on Study of Periodic Health Examinations in Hospitals (O. B. McGillicuddy, M.D., Chairman, L. J. Bailey, M.D., V. N. Slee, M.D., and E. P. Vary, M.D.) followed through on the instruction of the 1955 House of Delegates and found there were eight hospitals in Michigan conducting these examinations for other than their own employes.

7. Resolution re presentation of scroll to R. L. Novy, M.D., longtime President of Michigan Medical Service.

This was accomplished at a special luncheon arranged March 8 during the Michigan Clinical Institute.

8. Resolution re Salk vaccine propaganda was referred to the Michigan Delegation to the AMA House of Delegates. Resolutions from other states implemented this on the national level.

9. Resolution re fee for examination of mentally ill. Copies of this resolution were referred to each component county society with the request that it ask the probate judge or judges in its area to adjust the fee; also this request was the basis of a communication to the Michigan Probate Judges Association.

10. Resolution re Mediation in Michigan Medical Service cases. Copies of this resolution were sent to Michigan Medical Service and noted in the Secretary's Letter addressed to officers of component county societies.

11. Resolution re Study of Surgical Fees (Michigan Medical Service). This also was referred to the Study Committee on Fee Schedules (MMS) which accomplished a thorough study of all the fees in the various surgical specialties (see Annual Report of this Committee).

Recommendations

1. That the 1 per cent collection credit now granted to county medical societies be eliminated, inasmuch as all membership billing will be performed by the Michigan State Medical Society, and will relieve component society secretaries of this detail work.

2. That The Council be authorized to send MSMS representatives to Washington, D.C., in 1957 on the occasion of the Annual Michigan Day.

3. That contributions to the Beaumont Memorial Restoration Fund—by every individual MSMS member—be urgently recommended by the 1956 House of Delegates, and that a special letter campaign be conducted during the months of October, November, and December, 1956. Thus, every MSMS member will be given the opportunity to contribute with pride to the Beaumont Memorial —which will represent for generations the best type of public relations for the entire medical profession in this state.

Should any part of the debt owed the Michigan State Medical Society be extant as of December 31, 1956, this sum should be wiped off the MSMS books and listed permanently as the Society's contribution to the Beaumont Memorial, in accordance with Resolution adopted by the 1955 House of Delegates.

Further, that the following recommendation of the Beaumont Memorial Committee be given serious and favorable consideration by the House of Delegates recognizing that sustained effort is vital, that a Beaumont Memorial Foundation be created immediately to further the purposes and continuing needs of the Beaumont shrine at Mackinac Island, that every MSMS member be notified that he is not only eligible to join at an annual membership fee to be determined, but that he be invited and urged to join.

4. That the House of Delegates instruct The Council whether or not the Uniform Fee Schedule for Governmental Agencies should be restudied and revised, before necessary reprinting.

5. That the recommendations of the Committee on Mediation, Ethics, and Grievance be given serious consideration, at this Session, by the House of Delegates.

6. That medical men become increasingly active in civic affairs, assuming the opportunities and obligations of their standing as leading citizens, to the end that public opinion generally is continued favorable to a maintenance of the present high standards of public health and medical education and service. This best is accomplished on the local level through active membership by doctors of medicine in chambers of commerce, health councils, and other reputable community and civic organizations.

7. That members of the MSMS House of Delegates, as the natural leaders in their medical areas, express pride before their confreres in the excellent MSMS health and accident insurance program (Provident Life and Accident Insurance Company) so that during the ensuing Society year, a substantial majority of members is enrolled in this protective device.

8. That the following amendments to the Constitution and By-Laws be considered by the 1956 House of Delegates:

(a) Amend the Constitution in Article X, Sections 1, 2 and 3, so that the Vice Speaker of the House of Delegates is made a member of The Council and of its Executive Committee, with power to vote. (Also amend the By-Laws, Chapter 11, Section 10.)

(b) Amend the By-Laws in Chapter 8, Section 10-d, to specify that AMA Delegates and Alternate Delegates shall take office on January 1 following their election in September.

(c) Amend the By-Laws (Chapter 11, Section 4) so that all county medical societies in a Councilor District first shall be contacted for approval of proposed appointment of a Councilor by the President, in case of resignation of a Councilor.

9. That the House of Delegates eliminate the present assessment and authorize in lieu thereof an increase in dues adequate for the maintenance of our modern Society program and to insure reserves necessary to meet a major emergency.

Respectfully submitted,

THE COUNCIL

D. Bruce Wiley, M.D., *Chairman*

W. B. Harm, M.D., *Vice Chairman*

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O. B. McGillicuddy, M.D.
G. W. Slagle, M.D.
Ralph W. Shook, M.D.
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Arch Walls, M.D., *President-Elect*

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R. H. Baker, M.D., *Immediate Past President*

ANNUAL REPORT OF THE PUBLIC RELATIONS COMMITTEE—1955-1956

With several years of intensive effort to build on, MSMS Public Relations activities were expanded during the past year, and an awareness of PR penetrated even more deeply into the many facets of MSMS' program. Beyond heading up PR operations for the Michigan medical profession on the state and national levels, your Public Relations Committee placed additional emphasis upon aiding the promotion of planned PR efforts among county medical societies and their individual members.

Keynotes for the new year of effective PR program-

ming were presented at the three-day PR Seminar in Detroit last January, when representatives of most county societies convened for a concentrated educational program directed by a "faculty" experienced in the problems threatening the private practice of medicine today, the policies of medical organization, and the successful methods needed to reach the immediate and long range goals of the medical profession. Expansion of the former one-day conference to a three-day seminar was received enthusiastically and proved to be a wise step in promoting continued interest among county societies.

Intra-professional understanding of the aims, policies, and achievements of MSMS is the cornerstone for successful public relations. To increase such understanding, a new brochure entitled "Progress-Because Doctors Work Together" was published in January under direction of the Public Relations Committee. This booklet, first distributed at the PR Seminar, was placed in the hands of every member of MSMS. Each new member receives a copy of this orientation handbook upon joining the Society. The brochure explains the history, structure, operations and advantages of MSMS, and encourages participation in medical organization.

Medical Education Week a Success

The most intensive single campaign of the year with PR value was Michigan participation in the first nationwide observance of a Medical Education Week in April, spearheaded by MSMS with strong collaboration from the State's two medical schools and a Detroit Citizen's Committee composed of civic and industrial leaders. Additional strong support of this campaign was given by the Woman's Auxiliary. Among all the states taking part, Michigan assumed a position of leadership. The campaign plan adopted by MSMS for Medical Education Week and the evidence of our success have been compiled into a kit by the National Foundation for Medical Education for distribution to the nation's eighty-two medical schools. This kit will serve as a guide for planning the observance of Medical Education Week in 1957.

Adopting a positive approach, MSMS used this campaign to show how the medical profession in Michigan has sought through the years to (1) increase the number of M.D.'s, (2) improve the distribution of medical service, (3) enlarge our medical schools without sacrificing quality, and (4) attract graduates and practitioners from other states. A graphic presentation developed to tell the basic story found its way into almost every daily and weekly newspaper in Michigan, and attracted widespread editorial comment.

Other Medical Education Week activities worthy of mention are: the Governor's proclamation, with a tape recording of the Governor reading his words distributed to 100 radio stations; three-quarter page display advertisements by MSMS in five major Sunday newspapers and one metropolitan weekly paper; two MSMS news releases to 400 Michigan newspapers, both widely used; one release from the Detroit field office to 431 community publications; spot announcements to all Michigan's radio and television stations; open house at Wayne State University College of Medicine attended by 500 carefully selected community leaders; programs and spot announcements carried by sixty radio stations; special television programs over four metropolitan TV stations; appearances before service clubs in several major cities; various community activities before civic groups, including the showing of MSMS movies.

The Woman's Auxiliary received first place honors in the national "80 dimes campaign" conducted in connection with Medical Education Week.

Co-operation with County Societies

As a stimulus to local PR planning, MSMS Officers and staff members met with various county society PR chairmen and officers, PR committees, and other leaders of county societies. Special meetings on PR programs and problems were conducted with county society leaders in Wayne, Branch, Monroe, Hillsdale, Lenawee and Macomb counties. At such meetings the MSMS guidebook for local PR effort, "Winning Friends for Medicine," in its revised form, was used as the basis for planning a well-rounded program. A series of special public relations conferences were held with leaders of county medical societies in the Upper Peninsula in July, when top MSMS Officers and PR representatives visited that area.

Of primary importance were the appearances of President W. S. Jones, M.D., before almost every county medical society in the State with an illustrated talk on the progress, program, and benefits of MSMS. A PR representative accompanied Dr. Jones on each of his visits and conferred informally with society officers to offer MSMS help in meeting local PR needs.

Display Advertisements Scheduled

A bold new departure was introduced in April at a time when voluntary prepaid medical service as typified by Michigan Medical Service (Blue Shield) was the target of a rash of misleading news articles instigated by groups who for many years have been associated with a long-term campaign for federal health insurance. Under PR Committee supervision, with approval of The Council, eye-catching advertisements were prepared by MSMS giving the facts about Blue Shield. The first advertisement appeared in five of the largest Sunday newspapers and the State's second-largest weekday newspaper. Other display advertisements in the series have been prepared for use at the discretion of The Council.

Looking to sustained PR activity in the future, the groundwork has been laid for establishing a Public Relations Library. The advices of professional librarians have been used to catalogue and codify the great mass of PR materials and tools accumulated through the past decade. The new library at MSMS headquarters in Lansing is seen as a major resource in the efficient operation of our PR program in years to some.

With another look to the future, educational activities among medical students, interns, and residents, in social and economic aspects of the private practice of medicine, were stepped up during the year. Although not under the direct jurisdiction of this Committee, these activities received full co-operation. Social, economic and PR topics were presented to senior students at both of the medical schools in Michigan. In the interest of better understanding of medical organization and a greater PR consciousness, enlargement of this program is under active consideration.

"Good Citizenship" Stressed

With 1956 being a crucial election year in which M.D.'s, their families and associates should accept their full responsibility, "good citizenship" activities were inaugurated early in the pre-election period. The importance of being properly registered and casting a vote in both the primary and general elections is being stressed, along with the necessity for choosing qualified candidates. All members of MSMS, its Woman's Auxiliary, and the Michigan State Medical Assistants Society are being urged to do their duty as "good citizens." An informal "committee of 400," selected from among members who have shown above-average interest in governmental affairs in the past, serve as the action group in the "good citizenship" efforts.

In its various informational and educational work during the past year, MSMS again has had excellent co-operation from, and great success with, all media of mass communication in the State.

Working through county societies, the impact via radio and television has been unusual. Much of the radio and television programming has been handled through the PR Field Secretary in Detroit. Seventeen powerful radio stations have blanketed the State with transcribed health and medical broadcasts supplied by AMA through MSMS to local societies. In most instances these programs have been presented daily. All

but three stations have used more than one thirteen-week series, with many stations using more than five, and one station using as many as eighteen series during the year.

From a script prepared by the MSMS PR Department, the Saginaw County Medical Society presented a series of "live" fifteen minute programs weekly for thirteen weeks.

Popular Radio Shows

MSMS is now assisting Wayne County Medical Society in a weekly radio show broadcast Sunday evenings over WJBK. The "Tell Me, Doctor" radio series continues to be heard over two Michigan stations. This MSMS program has been used continuously for more than eight years by radio stations WHFB in Benton Harbor and WKZO in Kalamazoo, with the same pharmacies as sponsors throughout the period. WKZO now writes fresh scripts from material supplied by MSMS. Each script is screened by a MSMS representative.

In addition to the special Medical Education Week telecasts already mentioned, weekly series of film shows over WPAG-TV, Ann Arbor, inaugurated in 1953, continued throughout this year. Material for these telecasts is provided by MSMS in co-operation with the Washtenaw County Medical Society. Over WKAR-TV, East Lansing, MSMS co-sponsored a weekly medical program from September to June. Alternate sponsors were the Ingham County Medical Society and the Michigan Health Department. MSMS also co-operated with the Michigan Health Council in its weekly TV show over WKAR-TV.

The MSMS film library, available for use by county societies in presenting local telecasts, was enlarged this spring by the addition of five kinescope recordings dealing with popular medical subjects and prepared by the University of Michigan Medical School.

Medical and health news on a variety of topics prepared during the year by MSMS were readily accepted by newspapers and the newswire services. A new medical column was inaugurated in "The Michigan Farmer," most widely read farm journal in the State, through arrangements made by your PR Committee. Educational material was presented to thousands of additional persons through specially prepared exhibits sponsored by MSMS at the 1956 Michigan Rural Health Conference in Kalamazoo, the 10th Annual Michigan Clinical Institute in Detroit, the Michigan State Pharmaceutical Association Convention in Grand Rapids, the MSMS 90th Annual Session, and the 1955 Michigan State Fair. The Michigan Diabetes Society was invited to share space in the State Fair exhibit, a partnership which was highly successful.

MSMS also exhibited at the first Flint Vocational Fair for high school students, and supplied quantities of material on medical education and medical associates careers for a number of "vocational days" held in high schools throughout the State.

Although no new movies have been released by MSMS during the past year, the filming of a motion picture on epilepsy has been completed and earlier productions are still timely and have great audience appeal. During 1955-56 "Lucky Junior," "To Save Your Life" and "In Planning Your Career" have been shown some 250 times before audiences totaling approximately 20,000. The demand for these films continues.

MSMS' collaboration year to year with close to 200 statewide and national organizations and agencies interested in the field of health continues to have PR aspects of immeasurable value. This liaison is carried on with both governmental and voluntary groups, and each year new areas of co-operation are discovered and utilized.

Close bonds are maintained with such closely related organizations as Michigan Medical Service, the Michigan Health Council, the State Health Department, Michigan Crippled Children Commission, Michigan Cancer Coordinating Committee and a number of similar organizations with which MSMS has maintained a cordial working relationship. Stronger bonds were formed with the Adult Education Association, Michigan State Pharmaceutical Association, and several organizations in the field of mental health. The relationship with the State Board of Registration in Medicine was strengthened and revitalized. MSMS worked closely with that agency and its new administration in several important projects, and devised a plan for creating goodwill among new medical licensees by providing attractive printed copies of the Hippocratic Oath through the offices of the State Board.

A Look to the Future

Although MSMS has made great strides since inaugurating an intensive PR program several years ago, this Committee feels that there can be no letdown. On the contrary, we believe we must search for new avenues for promoting good public relations, and try to expand those methods which have proven successful in the past. The ultimate goal is to preserve medical freedom and the private practice of medicine so the people of Michigan may continue to benefit from medical progress and high standards of health care.

In everyday government, industry, and community life there are a growing number of elements antagonistic to the private practice of medicine. Even socalled "conservative" community leaders and civic groups continue to propose ideas and projects which, if carried to the ultimate, would greatly curtail the freedom of the medical profession to the detriment of the people it serves. Many of these proposals are made on the basis of misinformation and cloudy reasoning. Other individuals and organizations already are openly committed to policies which would restrict private medicine. Medical organization and the medical profession can meet and defeat these continuing threats only by a sustained presentation of the truth through every available channel.

Respectfully submitted,
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R. W. Teed, M.D., *Vice Chairman*
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E. L. Spoehr, M.D.
W. F. Strong, M.D.
C. K. Stroup, M.D.
R. L. Thirlby, M.D.
T. J. Trapasso, M.D.
C. L. Weston, M.D.
Wayne L. Whitaker, Ph.D.
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L. Fernald Foster, M.D., *Advisor*
L. W. Hull, M.D., *Advisor*
B. T. Montgomery, M.D., *Advisor*
T. P. Wickliffe, M.D., *Advisor*

ANNUAL REPORT OF THE ETHICS COMMITTEE—1955-1956

Once again we report a marked inactivity which may be attributed to several things: (a) the component societies are having indoctrination meetings for new members which gets them off on the right foot; (b) local ethics committees are accepting their responsibility more than in the past and doing their own "laundry" at home; (c) business is generally so good that there is no occasion for attempts at shadowy practices nor a desire to take on more work than comes honestly.

All three of the cases reviewed by this Committee ended up under heading (b) above, two automatically after a slight hint that the problem was local. The third one required a special meeting where, after considerable argument, the decision of the local society was reversed by the majority of those present.

We are proud to be members of a society that behaves generally so well.

Respectfully submitted,
H. W. Porter, M.D., *Chairman*
W. L. Harrigan, M.D.
R. J. Hubbell, M.D.
F. H. Lindenfeld, M.D.
E. A. Oakes, M.D.
A. H. Price, M.D.
E. A. Osius, M.D.
W. F. Strong, M.D.
C. E. Umphrey, M.D.
M. R. Weed, M.D.
J. Joseph Herbert, LL.B.

ANNUAL REPORT OF ADVISORY COMMITTEE TO MICHIGAN STATE MEDICAL ASSISTANTS SOCIETY—1955-1956

The Medical Assistants Society Advisory Committee held two meetings during the year 1956.

The initial meeting was held at the Durant Hotel, Flint, on April 15, 1956, at which time the completed program of the MSMAS Convention in Detroit on September 26 and 27, 1956, was discussed and approved. The Committee also noted with approval a health and accident insurance group plan for the MSMAS. The Advisory Committee expressed a favorable opinion of the organizational meeting of the American Association of Medical Assistants held on November 5 and 6, 1955, in Kansas City, Kansas. Fifteen states were represented at this meeting at which time tentative Constitution and By-Laws were drawn up. The first annual meeting of this new organization is to be in October, 1956, at Milwaukee, Wisconsin.

Noteworthy was the one-day meeting of medical assistants of the Upper Peninsula on June 23, 1956, at Sault Ste. Marie, Michigan. The meeting was held for the purpose of forming a Component Society of Upper Peninsula Medical Assistants and the attendance was gratifying.

Relative to assisting medical physicians in securing more skillful office personnel the MSMAS, for the first time, presented a scholarship for a one-year course for Medical Assistants at the Highland Park Junior College.

Membership in the MSMAS now totals 715 with a total of fifteen Component Societies as of May 15, 1956.

The energetic Medical Assistants printed two lengthy Bulletins, a News letter and a post-Convention Bulletin which contained presidential reports and beneficial news for each member during 1956.

The second meeting of the Advisory Committee, held on June 3, 1956, at 606 Townsend Street, Lansing, was held primarily because of the requirements of the MSMAS constitution.

Great praise should be given the MSMAS for their attitude in making theirs one of the outstanding groups in the nation. They have set an excellent example for future medical assistants societies and have improved each year they have been in existence in number and ability. Their officers are of the highest calibre and are to be complimented on their administrative accomplishments.

Respectfully submitted,
F. J. Busch, M.D., *Chairman*
Ralph W. Shook, M.D.
R. W. Pomeroy, M.D.
E. R. Sherrin, M.D.
Otto Van der Velde, M.D.
J. E. Webber, M.D.

ANNUAL REPORT OF ADVISORY COMMITTEE TO WOMAN'S AUXILIARY—1955-1956

There were no meetings of this Committee during the year. Several discussions of matters relating to the activities of the Auxiliary occurred between the Chairman and the President of the Auxiliary. Two matters of importance were referred directly to the Executive Committee of The Council.

The members of the Committee are aware of the fine work of the Auxiliary and refer the Delegates to the Annual Report of the President to be presented at the opening session of the House.

Respectfully submitted,
J. E. Livesay, M.D., *Chairman*
A. B. Aldrich, M.D.
W. J. Butler, M.D.
D. F. Scott, M.D.
W. L. Sherman, M.D.

ANNUAL REPORT OF THE GERIATRICS COMMITTEE—1955-1956

The Geriatrics Committee held two meetings this year, one in Detroit and the other in Ann Arbor with a good representation each time. Several subcommittee meetings were held relative to health insurance plans for the older person; conference planning for the Geriatric meeting in Ann Arbor; diabetes exhibit at the State Fair; improving standards for nursing homes through the co-operation of the County Bureaus of Social Aid, Board of Health and Association of Approved Nursing Homes. Several of our members have filled speaking engagements throughout the State before lay audiences talking on various gerontological subjects.

The original plan of having another conference on aging for physicians during the winter was discarded when it was learned that the 9th Annual Conference on Aging to be held in Ann Arbor during the summer was to have as its theme "Health for the Aging," medical and social services. It was thought that these two conferences could best be combined, and would be jointly co-sponsored by the Michigan State Medical Society and the Departments of Postgraduate Medicine and Gerontology at the University. The State Society, through a program subcommittee, took an active part in the planning of this conference and several of its members participated in the workshops and clinics.

Several excellent live clinical presentations were held at the University Hospital and were well attended.

During the next year it is hoped that the May issue of the Michigan State Medical Society Journal will be devoted entirely to geriatric problems. Conferences are also planned with the State Department of Health for improving the standards in nursing homes throughout the State.

Respectfully submitted,

A. Hazen Price, M.D., *Chairman*
F. C. Swartz, M. D.
C. H. Adams, M.D.
R. M. Athay, M.D.
F. W. Baske, M.D.
H. B. Bennett, M.D.
J. R. Brink, M.D.
E. F. Crippen, M.D.
R. E. Dustin, M.D.
G. S. Fisher, M.D.
P. C. Gittins, M.D.
W. D. Harrelson, M.D.
E. J. Kulinski, M.D.
J. J. Lightbody, M.D.
Herbert Rosenbaum, M.D.
J. M. Ryan, M.D.
L. F. Segar, M.D.
C. W. Sellers, M.D.
G. C. Thosteson, M.D.
S. C. Wiersma, M.D.
C. S. Wilson, M.D.
H. W. Woughter, M.D.
W. M. LeFerve, M.D., *Advisor*

ANNUAL REPORT OF MATERNAL HEALTH COMMITTEE—1955-1956

The Maternal Health Committee continues in the sixth year of its study of maternal deaths in the State of Michigan. Several interesting and vital things have occurred in the past year.

1. At the national level, two meetings have occurred with representatives from the states presently participating in state surveys in an effort to bring about uniformity and agreement in scope, definitions, aims and results, so that comparisons of the state surveys can be made and put together in one large national picture. Michigan has had representatives at these meetings and our activities have been surveyed by the National AMA Committee, and we have been reported in detail in the American Medical Association Journal. The observations our Committee published in the Michigan State Medical Society Journal, February, 1955, have been referred to by authors on similar studies in several states.

2. As of October, 1955, the State Health Department was fortunate in obtaining the services of Dr. Charles Behney as Consultant to the Department in Maternal and Child Welfare. He provides a distinct impetus to the Committee's activities and is again furnishing that liaison between the Committee and the local physicians throughout the state.

3. In November, 1955, under the combined auspices of the State Maternal Health Committee and the Michigan Society of Obstetricians and Gynecologists, a meeting was held in Grand Rapids, at which time Dr. John McKelvey of Minnesota was our guest speaker. By means of short presentations by our own members in Michigan, namely, Dr. L. Paul Ralph, Dr. Tommy N. Evans and Dr. Mary Lou Byrd, Dr. McKelvey was able to make comparisons between Michigan and Minnesota and exchange ideas and experiences which we are sure are beneficial both to the studies in Michigan and Minnesota.

4. In February, 1956, the Oakland County Medical Society activated its Maternal Health Committee to review maternal deaths at regular monthly meetings. The attendance at these meetings has been approximately twenty (20) physicians in Oakland County each month.

The entire Maternal Health Committee had a meeting in February, 1956. Meanwhile, the numerous subcommittees are constantly at work. Presently, in June, 1956, the Subcommittee on Publications is reviewing and attempting to bring about a résumé of the first four years, and by September this same Committee expects to have the evaluation and observations available for publication of the first five years.

Within a few days of the writing of this report, the entire Committee is planning to meet and we have as our guests at that time, Dr. James F. Donnelly, Chairman of the Maternal Health Committee of North Carolina, who will exchange with us ideas and experiences and Mr. J. Joseph Herbert, Legal Counsel for the MSMS. At this same meeting we are expecting a report from a subcommittee with respect to the establishment of a registry of maternal tissues, to be housed and utilized for teaching purposes.

Respectfully submitted,

P. E. Sutton, M.D., *Chairman*
Francis A. Jones, Jr.. M.D.
F. W. Bald, M.D.
C. A. Behney, M.D.
C. M. Bell, M.D.
H. R. Brukardt, M.D.
G. B. Corneliuson, M.D.
A. L. Foley, M.D.
Margaret S. Hersey, M.D.
E. S. Hoffman, M.D.
W. C. Lambert, M.D.
H. W. Longyear, M.D.
A. G. McCuaig, M.D.
N. F. Miller, M.D.
H. A. Ott, M.D.
C. F. Shelton, M.D.
C. S. Stevenson, M.D.
D. W. Thorup, M.D.
C. E. Toshach, M.D.
Kathryn D. Weburg, M.D.
H. R. Williams, M.D.
Viola G. Brekke, M.D.
Mary Lou Byrd, M.D.

Addendum

1. The Maternal Health Committee in collaboration with the Michigan Department of Health presented an exhibit on maternal and neonatal mortality to the medical institute in Detroit in the spring, and to the Upper Peninsula Medical Society on June 22 and 23.
2. The Committee with the Department of Health prepared a specimen obstetric record form which complies with the requirements of the Department of Health for licensure and provides all data necessary for a satisfactory study of maternal deaths.

ANNUAL REPORT OF THE LEGISLATIVE COMMITTEE—1955-1956

Every year it becomes more and more evident that constant legislative alertness and diligent, concerted activity in the legislative sphere by MSMS is a responsibility it cannot lightly dispatch. The experience of the 1956 legislative session emphasizes the acuteness of this responsibility to the medical profession and coincidently to the well-being of the citizens of Michigan.

The chiropractors made their perennial attempts to enlarge their scope of practice into medical fields; a single department administration of health agencies of the state received much attention; and efforts of pressure groups to discredit and destroy Blue Shield and Blue Cross broke into the open.

At last count (since at this writing the Legislature is still convened in Special Session) there have been introduced in the 1956 session 801 bills; of these 93 have required the attention—in greater or lesser degree —of MSMS. Because the members of the Legislature were able to get accurate and immediate information

from MSMS regarding this maze of health proposals much improvement was made in the existing laws. Also it must be noted that because of the efforts of MSMS, and other allied organizations also dedicated to improving health standards in Michigan, passage of legislation deleterious to the high standards already established in Michigan was prevented.

Justifiably MSMS can take satisfaction in the knowledge that it was instrumental in preventing the passage of these proposals which would have:

—permitted chiropractors to practice medicine, chiropody, osteopathy, psychiatry, in effect anything they wished, because of a cleverly worded change in the definition of chiropractic (H. B. 181, failed to be reported from House Committee); a companion measure would have allowed their licensing board to increase its power over individual members through a change in their code of ethics adoption procedure (H. B. 273, failed to be reported from House Committee);

—instituted a single department administrator over most of the state's health agencies, including the Mental Health Commission, the Hospital Survey and Construction Department, the Tuberculosis Sanatorium Commission, the Department of Health, and at one stage the Crippled Children Commission, with no promise of its workability (H. B. 102 and S. B. 1044, one defeated on the House floor and the other in Senate Committee);

—allowed influx of substandard physicians into Michigan by removing powers of the Board of Registration in Medicine to maintain "quality control" of Michigan licensure and reciprocity (H. B. 8, failed to be reported from Senate Committee);

—instituted annual registration of M.D.'s prematurely without an accurate estimate of costs to be incurred by the Board of Registration in Medicine or the amount of annual registration fee necessary (H. B. 219, failed to be reported from House Committee);

—directed a Legislative Committee to "study methods and procedures whereby an osteopathic college of medicine could be established" within Michigan, presumably as a state institution (Senate Resolution No. 19, failed to be reported from Senate Committee);

—threatened the quality of medical and hospital care for Michigan crippled children and afflicted children, and opened the door not only to osteopaths, but to chiropractors and substandard hospitals as well, by way of an amendment attached to a routine appropriation bill, which amendment was removed in the final hours of the regular session.

By the same token MSMS can take credit for the fact that it helped sponsor and support some creditable health legislation which:

—established regional diagnostic centers for mentally ill and required diagnosis of patient after committment by the Probate Court but prior to final admittance to institution (H. B. 21);

—transferred the licensing of nursing homes from the Social Welfare Commission to the State Health Commissioner and revised operational procedures (H. B. 382);

—provided for establishment of community health clinics (formerly child guidance center) on local levels (S. B. 1311);

—increased old age assistance benefit ceilings from $80 to $90 per month for hospitalization (S. B. 1109);

—established Wayne University as a State University (H. B. 287);

—made initial and continuing appropriations to the University of Michigan for construction of a Medical Science Building, a Mental Research Building and a Children's Pediatric Unit (S. B. 1338 and S. B. 1339).

MSMS also took a keen interest in national legislation and working closely with the AMA contributed to many successes in the Congress. In May a delegation from the state society met in Washington with many congressional and other governmental leaders.

Space does not permit here a lengthy introspection into every phase of action on every piece of legislation of interest to MSMS in the 1956 session of the Legislature; many proposals were annual irritants, such as the chiropractors' attempts to legislate themselves into practices for which they are neither trained nor qualified; many were the products of the changing times, such as House Bill 243 which would regulate the handling and use of radioactive materials in industry; none were lightly dealt with by MSMS legislative personnel.

In the final analysis the individual M.D. is the most important man in the entire legislative effort of MSMS. This is an election year. If every M.D. in Michigan will remember that he is also a citizen of his community; if he will support the legislative candidate who has the greatest understanding of the problems of health and is dedicated to the maintenance of the progress already made; if every M.D. will then make himself available to his legislator for advice and counsel; only then will Michigan be able to boast of the best health program of any state in the nation.

To all of our colleagues who have in the past year contributed so generously of their time, counsel and cooperation we offer our heartfelt thanks. To them must go the honors for the successes credited to the Legislative Committee.

Respectfully submitted,
L. A. Drolett, M.D., *Chairman*
O. B. McGillicuddy, M.D., *Vice Chairman*
A. B. Aldrich, M.D.
William Bromme, M.D.
G. V. Conover, M.D.
J. C. Elliott, M.D.
O. K. Engelke, M.D.
N. J. Hershey, M.D.
M. H. Marks, M.D.
P. T. Mulligan, M.D.
J. S. Rozan, M.D.
E. C. Swanson, M.D.
H. A. Towsley, M.D.
R. V. Walker, M.D.
Arch Walls, M.D.
D. Bruce Wiley, M.D.

ANNUAL REPORT OF MENTAL HEALTH COMMITTEE—1955-1956

During the year ending May, 1956, the Committee on Mental Health held three general meetings. Two new subcommittees were appointed.

Members participated in the following meetings:

1. Second Annual Conference on Mental Health, American Medical Association at Chicago.
2. Preventive Medicine Committee Meeting of Michigan State Medical Society.
3. Meeting of Michigan Association for Retarded Children arranged by the Michigan Welfare League.
4. Meetings with Michigan Society of Neurology and Psychiatry.
5. Meeting with Executive Committee of the Michigan State Medical Society Council concerning the Minnesota Plan for Expert Testimony.

A compilation of the results of the Epileptic Survey was made by the Subcommittee on Convulsive Disorder with the help of Mr. Raymond Dennerll, Executive Director of Michigan Epilepsy Center. Since there was only a five per cent return of the questionnaires, it was decided that the Mental Health Committee should continue its interest in the entire problem of epilepsy, especially in regard to acquainting doctors of medicine with the diagnosis and treatment of epilepsy; and that a second circularization of medical doctors in Michigan should be considered.

The Attorney General's Opinion on Psychotherapy was carefully considered and discussed. The Mental Health Committee feels strongly that psychotherapy is a medi-

cal treatment, and that Opinion No. 2359 should be revoked.

A number of mental health bills which had been introduced in the State Legislature were studied by the Committee. Its opinions with respect to the proposed legislation were thereafter submitted for the information of the Legislative Committee.

The Mental Health Committee agreed with the American Medical Association's approval of the series of letters "Milestones to Marriage" which might be suitable for distribution to high school seniors. This project is being sponsored by the Woman's Auxiliary of the American Medical Association.

The Chairman wishes to thank the members of the Committee on Mental Health for their interest and support, and it is our hope that the activities of the Mental Health Committee have been of some assistance to the Michigan State Medical Society.

Respectfully submitted,

I. A. La Core, M.D., *Chairman*
Z. S. Bohn, M.D.
W. E. Clark, M.D.
F. P. Currier, M.D.
J. M. Dorsey, M.D.
T. J. Heldt, M.D.
L. E. Himler, M.D.
M. H. Hoffmann, M.D.
R. F. Kernkamp, M.D.
M. H. Marks, M.D.
P. A. Martin, M.D.
F. O. Meister, M.D.
C. J. Mumby, M.D.
W. H. Obenauf, M.D.
R. W. Waggoner, M.D.
E. M. Williamson, M.D.
H. B. Zemmer, M.D.

ANNUAL REPORT OF THE SCIENTIFIC RADIO COMMITTEE—1955-1956

During the year forty scientific radio programs were prepared and presented by members of the Michigan State Medical Society and the faculties of the University of Michigan Medical School and the Wayne State University College of Medicine. These broadcasts went out weekly over radio stations WUOM, WPAG, WBRM, WDET, WKAR, WLDM, WMDM and WFUM.

The following titles are of the subjects discussed: The Hygiene of Pregnancy, Management of Labor, Anesthetics, Care of the Newborn, The Baby's First Year, Feeding in the First 5 Years, The Cerebral Palsied Child, Muscular Dystrophy, Obesity—How to Reduce, Arthritis, Arthritis Research, Physical Medicine—Rehabilitation of Arthritis, Backache, What Can We Do About Polio Today, Rehabilitation of the Polio Patients, Juvenile Diabetes, Adult Diabetes, Congenital Heart Disease, Rheumatic Heart Disease, Acquired Heart Disease, Living with Your Heart Disease, Accident Prevention in Childhood, Living with the Atom Bomb, Burns, What Abdominal Pain Means, Your Responsibility in Case of Accident, Skin Cancer, Cancer of the Female Generative Organs, Gastrointestinal Cancer, Lung Cancer, Cancer of the Prostate, Multiple Sclerosis, What Mental Health Means to Me, Hearing, Headaches, The Importance of Tuberculosis, Treatment of Tuberculosis, Seasonal Allergy, Summer Skin Complaints, Adolescent Problems—Sex Education.

Insofar as is possible the programs were developed to coincide with the activities of the National and State Health agencies, i.e. Cancer Month, Heart Month, et cetera. Taped recordings of each of the above programs have been made available through the Michigan State Medical Society for use by county medical societies or physicians who wish to either use them directly or to give similar talks to lay audiences in their own communities. At the meeting of this Committee on December 15, 1955, the following recommendations were made:

1. To broaden the distribution of these tape recordings to additional stations in the state.
2. It is planned to expand health education programs to the public schools in some 40 counties in the state. These schools are now receiving the Michigan Radio Classroom from station WUOM of the University of Michigan. These programs should be available in the fall of 1956.

Respectfully submitted,

H. A. Towsley, M.D., *Chairman*
C. B. Beeman, M.D.
J. H. Buell, M.D.
W. L. Foster, M.D.
C. E. Lemen, M.D.
G. H. Scott, Ph.D.
R. W. Teed, M.D.
K. W. Toothaker, M.D.
E. C. Vonder Heide, M.D.
J. M. Sheldon, M.D.

ANNUAL REPORT OF POSTGRADUATE MEDICAL EDUCATION COMMITTEE—1955-1956

The Committee met twice during the year, on January 12 and May 26.

Members of the Committee suggested subjects for the postgraduate medical education program: These subjects included (a) newer drugs and their effectiveness, (b) the doctor's responsibility in prevention of home accidents, especially in children, (c) asphyxia and anoxia in the newborn, and (d) rehabilitation. In connection with the last mentioned subject, the Committee on Study of Prevention of Highway Accidents, of which Dr. John R. Rodger is Chairman, suggested that a panel of two of the maxillo-facial surgeons and a neurosurgeon give a program at one center, and at another center the program be given by an orthopedic surgeon and a general surgeon interested particularly in abdominal bleeding.

All these subjects were thought to be timely and suitable, and the local members of the Committee were authorized to make the necessary arrangements to include them in the program whenever speakers on these subjects were available.

The recommendation that two speakers only be sent to a center for a program has been carried out and has proved to be very satisfactory.

Dr. W. S. Stinson, Councilor and Chairman for the 10th District, reported that Bay City enthusiastically requested the continuation of an extramural teaching cener there.

The Chairman reported on the extramural program in the various teaching centers:

The subjects presented during the year were:

Fall Program

Recent advances in allergy
Diseases of extra-hepatic biliary tract
Hypertension
Myocardial infarction
Newer drugs of proven and potential value
Peripheral vascular disease
Some medical and surgical aspects of endocrine disease
Surgery of peptic ulcer
Systemic disease in relation to oral disease
Treatment of liver disease
Treatment of peptic ulcer
Treatment of thyrotoxicosis

Spring Program

The medical and surgical management of heart disease
Medical economics and medico-legal aspects of medicine
Pathological physiology of the liver
Management of facial injuries
Neurological emergencies
The treatment of thyrotoxicosis
Surgery in the aged
Urological problems in infancy and childhood

Attendance—Extramural Program

Center	Fall 1955	Spring 1956	1955–56
Alpena	15	18	20
Battle Creek	65	—	65
Bay City	26	26	39
Cadillac	—	33	33
Flint	120	37	131
Jackson	73	52	78
Lansing	80	70	83
Muskegon	68	75	88
Port Huron	33	31	37
Traverse City	36	—	36
Upper Peninsula			
Escanaba	18	16	22
Houghton-Calumet	21	18	25
Iron Mountain	16	19	20
Ironwood	20	16	25
Marquette	26	21	30
Menominee	24	21	26
Sault Ste. Marie	26	31	39
	667	484	797

The Michigan Clinical Institute was held in Detroit on March 7-8-9. The program was well attended, the total registration being 2,475.

A list of intramural activities offered by Wayne State University College of Medicine is as follows:

Wayne State University College of Medicine

Name of Course	Attendance
Advanced Hematology	3
Basic Ophthalmology	11
Beginning Hematology	7
Cellular Physiology	1
Blood	3
Conference on Anesthesiology	22
Conference on Nutrition	15
Conference on Traumatic Surgery	225
Gastroenterology	2
General Endocrinology	3
Gynecologic Pathology	21
Medical Conference	5
Microbiology Seminar	2
Parasitology and Medical Enterology	1
Pathology of the Heart	6
Pathology of Neoplasms	6
Pathology of Parasitic Diseases	5
Physiological Chemistry Seminar	1
Physiology and Pharmacology Seminar	6
Psychoanalytic Psychiatry	2
Psychosomatic Conference	2
Regional Anatomy	
Thorax, Abdomen and Pelvis	32
Head and Neck	2
Back and Extremities	8
Seminar in Dermatology	5
Surgery Seminar	23
Special Topics	1
Symposium on Blood	200
	620

The following is an explanatory note by Arthur H. Smith, Director of Graduate Medical Education at Wayne State University:

"As you probably know these same courses are attended by our graduate students in the basic medical sciences and residents in hospitals who are in our graduate program. The enrollment figures given, however, are just for postgraduate doctors."

University of Michigan Medical School

Intramural Courses	Attendance
Anatomy	27
Basic Science	30
Clinical Exercises for Practitioners	9
Clinical Internal Medicine	53
Diagnostic Radiology	15
Diseases of Blood and Blood-forming Organs	21
Diseases of the Gastrointestinal Tract	25
Diseases of the Heart	29
Electrocardiographic Diagnosis	60
Foreign Physicians	12
Interns, Assistant Residents and Residents	358
Metabolism and Endocrinology	26
Obstetrics and Gynecology	42
Ophthalmology	146
Otolaryngology	28
Pediatrics	33
Radio-active Isotopes, Clinical Use of	25
Recent Advances in Therapeutics	38
Surgical Pathology Slides and Miscellaneous	14
	991

The following named physicians participated in the extramural postgraduate teaching program: Leonard Alexander, M.D., Paul S. Barker, M.D., William C. Baum, M.D., William H. Beierwaltes, M.D., Robert J. Bolt, M.D., Paul Campbell, M.D., Robert Crowley, M.D., Byrne M. Daly, M.D., Reed O. Dingman, M.D., Samuel W. Donaldson, M.D., Stefan S. Fajans, M.D., C. Thomas Flotte, M.D., Clifford W. Gurney, M.D., Harper K. Hellems, M.D., Paul E. Hodgson, M.D., Sibley W. Hoobler, M.D., Lyle F. Jacobson, M.D., Yoshikazu Morita, M.D., M. H. Seevers, M.D., John M. Sheldon, M.D., E. T. Thieme, M.D., Joseph L. Whelan, M.D., and Irving Young, M.D.

Upon recommendation of the Committee on Postgraduate Medical Education, the Michigan Foundation for Medical and Health Education granted certificates of Associate Fellowship in Postgraduate Medical Education to thirty-eight physicians and certificates of Fellowship to twenty-seven physicians.

The progress that is being made in the field of colored television for teaching purposes, including its future possibilities as a means of education for physicians in practice, was presented to the Committee.

The subcommittee to study audio-digest and clinic programs on tapes for distribution to the Michigan State Medical Society, consisting of Drs. M. A. Darling, R. M. McKean and E. G. Upjohn, reported on this subject in detail. In view of the multiplicity of factors involved, including places for storage and distribution of such tapes, it is recommended that these studies be continued and further report be made to the Committee as a whole at the next meeting.

The report by Mr. William J. Burns, Executive Director, MSMS, on the potential attendance in the extramural centers was most informative. Interestingly enough, it demonstrated that of the potential number between 60 and 75 per cent were attending our various programs. Mr. Burns followed a novel method of arriving at the potential attendance, in that he used maps relative to shopping centers in Michigan which would seemingly serve the doctors of a similar community in postgraduate medical education.

Respectfully submitted,

J. M. Sheldon, M.D., *Chairman*
E. I. Carr, M.D.
D. A. Cameron, *M.*D.
B. R. Corbus, M.D.
M. A. Darling, M.D.
A. C. Furstenberg, M.D.
J. R. Heidenreich, M.D.
D. H. Kaump, M.D.
R. M. McKean, M.D.
D. W. McLean, M.D.
J. M. Robb, M.D.
G. H. Scott, Ph.D.
E. F. Sladek, M.D.
H. A. Towsley, M.D.
E. Gifford Upjohn, M.D.
F. A. Weiser, M.D.
H. H. Cummings, M.D.

ANNUAL REPORT OF PREVENTIVE MEDICINE COMMITTEE—1955-1956

The following is a brief review of the activities of several of the Advisory Committees during the past year.

The Cancer Control Committee has integrated its projects and work with the Michigan Cancer Coordinating Committee which has set up several "basics": (1) a summary of recommendations; (2) the annual Michigan Cancer Conference; (3) a study of cancer quackery; (4) bi-monthly cancer pages in The Journal of the Michigan State Medical Society and a special cancer number of our Journal; (5) talks before professional and lay groups and distribution of the Cancer Manual. In addition, the Committee sponsored an exhibit on cancer quackery and a lecture by O. H. Wangensteen, M.D., at the 1956 Michigan Clinical Institute, and participated actively in the Third National Cancer Conference held in Detroit during June, 1956.

The Maternal Health Committee continues with its survey of maternal deaths, its accomplishments so far having received widespread notice and favorable comment.

The Geriatrics Committee has been very active in looking into the matter of prepayment health insurance plans for the aged; in setting up an exhibit on diabetes at the Michigan State Fair; in sponsoring a conference on gerontology at Ann Arbor; and in stimulating the interest of doctors of various communities towards improving the standards of nursing homes by providing medical supervision and inspection. The problem of service to the older age groups was discussed at several meetings with representatives of labor and management.

The Scientific Radio Committee is doing an outstanding job letting others speak for it to the tune of some 40 lectures on pertinent subjects.

The Postgraduate Medical Education Committee arranged a program that was favorably received throughout the State by an increasing number of doctors.

The Rheumatic Fever Control Committee revised and added to its series of Desk Reference Cards; sponsored a TV show in Bay City; arranged for bicillin to be made available for rheumatic fever prophylaxis; and participated in a program at Jackson for the annual meeting of the Michigan Society for Crippled Children and Adults.

The above list covers some of the outstanding activities of the Advisory Committees. The individual committee reports appearing in this handbook present in detail the telling effort that is being made by the medical profession in the interest of better public health.

The Committee is again grateful to our State Health Commissioner Dr. A. E. Heustis for his active participation in our deliberations and his helpful suggestions.

Respectfully submitted,
W. S. Reveno, M.D., *Chairman*
I. A. LaCore, M.D.
B. E. Brush, M.D.
A. C. Curtis, M.D.
S. T. Harris, M.D.
R. M. Heavenrich, M.D.
A. E. Heustis, M.D.
W. A. Hyland, M.D.
O. J. Johnson, M.D.
A. H. Price, M.D.
J. M. Sheldon, M.D.
P. E. Sutton, M.D.
J. W. Towey, M.D.
H. A. Towsley, M.D.

ANNUAL REPORT OF VENEREAL DISEASE CONTROL COMMITTEE—1955-1956

Dr. C. A. Smith, Medical Director, Chief, Venereal Disease Program of Special Health Services, Department of Health, Education and Welfare, reported that the venereal disease rate in Michigan was falling. In some states the venereal disease rate has increased as much as 700 per cent (due to an increase in gonorrhea). Michigan's reported venereal disease rate is only up 1 per cent, but reporting VD is still poorly done in Michigan. It was the consensus of the Committee that everything possible should be done to make the blank used for reporting venereal disease as simple as possible so that physicians could be better encouraged to report all venereal disease which they treat.

Dr. John Cowan reported on the migrant labor problem in the State of Michigan. A survey done in 1949-50 showed the major health problems among these people to be tuberculosis, venereal disease and dysentery. In surveys made in Saginaw County area, a rate of 19 cases of tuberculosis per 1000 x-rayed was found. Similar surveys of Saginaw residents the same year showed a rate of 0.7 active cases per 1000 x-rayed. In venereal disease, 439 migrants were given blood tests. Of these, 64 had positive serologic tests for syphilis. This was a positive STS rate of 144 per 1000 tested as compared to the Saginaw County average rate of 10 per 1000 tested at the time of the survey. During 1955 re-screening of migratory workers in the Saginaw-Huron-Tuscola and Bay County areas was done. The hours the clinics were open were 6:00 p.m. until midnight which made these examinations convenient to the employers but definitely inconvenient to the workers. The Department of Health was not satisfied with the results obtained in the 1955 survey and it was suggested (Dr. Cowan) that some venereal disease pamphlets be translated into Spanish dialect for a better dissemination of information regarding this disease to the migratory workers. The Department of Health again plans to survey this group in 1956 and other groups of migratory workers working in co-operation with the Michigan Sugar Beet Industry and Fruit Growers' Association.

Since tuberculosis and venereal diseases are both high in this group and hence pose a problem of dissemination of these diseases to Michigan's fixed population, the Venereal Disease Control Committee recommended and passed the following motion:

> "That the Venereal Disease Control Committee of the Michigan State Medical Society approves and urges the continuation of the migrant labor screening program for the year 1956 with utilization of all available services of the United States Public Health Service to screen at the source from which the workers come to correlate the end results with these findings as a basis for future study of migrant health problems in Michigan."

Dr. Cowan reported on the results of a selective mass blood testing program in 1955 when specimens were obtained by house to house canvassing and by utilizing those in small industry. The Department took 19,347 bloods, 915 positive and/or doubtful, 4.7 per cent doubtful, (non-white 7.1 per cent, white 1.6 per cent) 38 per cent with positive tests and 25 per cent with doubtful tests needed treatment. A larger survey will be made in Detroit during the coming year, testing persons sixteen years of age and over. Figures indicate that positive tests increase with age. It is estimated that 80 per cent are in the late, latent stage of the disease. Discussion brought out the fact that in 1955 gonorrhea appeared higher than in any year since 1947, and it was the feeling of the Committee that perhaps only 20 per cent of gonorrhea in Michigan is reported.

After considerable discussion regarding new serologic tests, the diagnosis of the following motion was made and passed:

> "That the Venereal Disease Control Committee of the Michigan State Medical Society recommends to the Michigan Department of Health that it seriously consider establishing TPCF tests in the State Health Department Laboratories on request."

Dr. L. W. Shaffer reported on the high incidence of venereal disease in teen-age high school groups in the Detroit area and a "Family Living" program has been instituted. It was reported that this program has been a major factor in the 40 per cent reduction in the venereal disease rate in the school in which it was instituted. The courses are given by teachers and the program is sponsored by the Mayor's Youth Committee and the Detroit Board of Education. The over-all decrease in venereal disease in 1954-55 in the "family living group" was 29 per cent insofar as secondary syphilis is concerned, whereas the State averaged a decrease of but 2 per cent.

> "The Venereal Disease Control Committee complimented the Mayor's Youth Committee and the Detroit Board of Education for this fine program and urged its continuation and expansion."

The program of prophylaxis of ophthalmia neonatorum was, likewise, thoroughly discussed as well as the substitution of other drugs for the 1 per cent silver nitrate that is required by State Law to be instilled in the eyes of each newborn infant.

The Venereal Disease Control Committee approved

the use of broad spectrum antibiotics on an experimental basis in the control of ophthalmia neonatorum and does not recommend a change in the state law on this subject at this time.

Respectfully submitted,
A. C. Curtis, M.D., *Chairman*
Ruth Herrick, M.D.
J. A. Cowan, M.D.
D. K. Hibbs, M.D.
H. L. Keim, M.D.
H. E. Lichtwardt, M.D.
L. W. Shaffer, M.D.
Frank Stiles, Jr., M.D.
R. S. Breakey, M.D.

ANNUAL REPORT OF COMMITTEE ON STUDY OF PREVENTION OF HIGHWAY ACCIDENT—1955-1956

The Committee had three meetings this past year, plus considerable work by many committee members outside the time of meetings.

School Bus Driver Examination.—The Committee has prepared an outline of a physical examination for school bus drivers, who at the present time do not need anything more than a chauffeur's license to qualify. This outline will be distributed to schools by the State Department of Public Instruction as a suggested outline for school boards to require their school bus driver applicants to pass.

High-school Driver Training Legislation.—The Committee actively supported the resolution adopted by the MSMS House of Delegates last September urging the Legislature to adopt a driver training law, and had contacts with the Governor and legislators on this subject. Some of the Committee's arguments received editorial comment in the *Detroit Free Press.* Michigan now has probably the most outstanding driver training legislation in the country. At the Traffic Safety Conference held in Chicago in May, this program received more comment than anything else Michigan has done traffic-wise.

Highway Safety on Extra-Mural Programs.—Dr. John Sheldon, Chairman of the Extra-mural Postgraduate Education Committee, met with the Traffic Committee for a mutual discussion of this problem. It was moved that two two-man teams be provided for possible use in the extra-mural programs this fall to discuss different aspects of the treatment of highway accidents.

Local Medical Society Traffic Committees.—Several local medical societies have formed traffic safety committees after this suggestion was made by the MSMS Committee by way of the Secretary's Letter.

MSMS Activities at AMA Level.—The following resolution was initiated by the Committee and introduced by the Michigan delegation at the November meeting of the AMA and was passed unanimously: "That the American Medical Association through its House of Delegates strongly urges the President of the United States to request legislation from Congress authorizing the appointment of a national body to approve and regulate safety standards of automobile construction." This resolution was referred by the AMA to the President's Committee on Traffic Safety.

The Chairman of the Committee introduced a resolution by way of the MSMS House of Delegates and the Michigan delegation to the AMA calling on the AMA to form a committee for the study of highway accidents. This resolution was passed and such a committee has been formed and was responsible for a fine traffic safety scientific exhibit at the June AMA meeting in Chicago, as well as for a half day program at one of the general sessions. Dr. Claire Straith, member of the MSMS Committee, was responsible for one of the exhibits.

A letter was drafted by the Committee and sent in the name of MSMS to Mr. Harlow Curtice, Chairman of the President's Committee on Highway Safety, urging that the AMA be made a member of the Advisory Council to the President's Committee. This has been done.

The Chairman of the Committee, as a member of Michigan's AMA delegation, appeared before the AMA reference committee considering both of the above mentioned resolutions last November, and also before the reference committee considering a Georgia State Medical Society's resolution on traffic safety at the June meeting of the AMA. At his suggestion the reference committee amended the latter resolution to suggest that some time soon the AMA call a nation-wide conference to consider the medical problems of highway safety, with emphasis being placed on urging individual state medical societies to initiate traffic safety committees. As a result of this the Chairman of the AMA Traffic Study Committee has asked the MSMS Committee to prepare a tentative program for such a meeting.

Regional Traffic Safety Conference in Chicago.—This was called by the President's Committee on Traffic Safety. The MSMS Chairman attended by appointment of MSMS President Jones. Three other of the 153 members from Michigan were physicians, representing the Michigan Committee on Trauma. The Conference was called to focus attention on the value of state and local safety councils, with Minnesota's experience as a state and Muskegon's as a small city as examples. The Michigan delegation elected a temporary Action Committee on Traffic Safety to call upon the Governor, of which the Chairman is a member.

Local Medical Society Participation in Safety Councils.—The Committee urges that county societies should be alerted to co-operate with local safety councils, and should help to initiate them in areas where they do not exist.

The Chairman would like to thank the very busy members of his Committee for their untiring efforts and wonderful co-operation. No MSMS Chairman could have a better committee!

Respectfully submitted,
John R. Rodger, M.D., *Chairman*
G. H. Agate, M.D.
W. W. Babcock, M.D.
H. E. DePree, M.D.
J. M. Dorsey, M.D.
H. F. Falls, M.D.
A. Z. Howard, M.D.
H. T. Johnson, M.D.
H. J. Meier, M.D.
C. L. Straith, M.D.

OFFICERS NIGHT BANQUET

Wednesday, September 26, 1956

7:00 p.m.

Grand Ballroom, Sheraton-Cadillac Hotel, Detroit

Sponsored by MSMS and its Woman's Auxiliary

All MSMS Members and their Ladies Invited

Technical Exhibits - 1956 Annual Session

Abbott Laboratories — **Booth No. 12**
North Chicago, Ill.

A. S. Aloe Company — **Booth No. 75**
St. Louis, Mo.

Visit Booth No. 75, where the A. S. Aloe Company will have on display a cross section of their most complete line of physical supplies and equipment featuring our Steeline Suite in the new Colonial Blue color.
Your Aloe representatives will certainly appreciate having the opportunity of discussing mutual items of interest with you.

American Ferment Company — **Booth No. 101**
New York, N. Y.

Products to be featured are Tod'l Medicated Lotion for the treatment of infantile skin affections and Falgos, the rapid acting, buffered antacid analgesic that causes no gastric upset. Representatives will also be pleased to demonstrate the advantages of Caroid and Bile Salts tablets, Alcaroid Antacid, and Supligol for biliary therapy.

Ames Company, Inc. — **Booth No. 28**
Elkhart, Indiana

MY-B-DEN, the adenine nucleotide, adenosine-5-monophosphate, found highly effective in the treatment of varicose vein complications, stasis and bursitis. MY-B-DEN preoperatively shortens the waiting period necessitated by poor tissue condition and enhances surgical results.
DECHOLIN. The routine use of this product in geriatric patients has proved most beneficial. Common geriatric problems of constipation, inadequate fat digestion and improper liver function are easily overcome.

Armour Laboratories — **Booth No. 9**
Kankakee, Ill.

The Armour Laboratories booth will feature H.P. Acthar Gel and Tryptar, as well as other specialties of Armour Research. Our representative will be happy to answer questions about Armour Products for anyone who cares to stop at our booth.

Audio-Digest Foundation — **Booth No. 99**
Glendale, Calif.

Audio-Digest Foundation—a subsidiary of the California Medical Association—gives the busy physician an effortless tour through the best of current medical literature each week. This medical tape-recorded "newscast"—compiled and reviewed by a professional Board of Editors—may be heard in the physician's automobile, home or office. The Foundation also offers medical lectures by nationally-recognized authorities.

Ayerst Laboratories — **Booth No. 58**
Chicago, Ill.

The Ayerst exhibit will feature "PREMARIN" Intravenous. Reports from hundreds of users emphasize that "Premarin" Intravenous *rapidly* and *safely* controls spontaneous hemorrhage of practically all types. The Ayerst representatives will be pleased to discuss "Premarin" Intravenous and any other product of Ayerst manufacture with visiting physicians.

Baby Development Clinic — **Booth No. 13**
Chicago, Ill.

BABY DEVELOPMENT CLINIC OFFERS demonstration materials: products and literature helpful in instructing prospective parents in the physical and emotional aspects of parent-child relationships arising out of the daily care of their infants and children; also aids to assist in providing emotional security for their children through school ages.
USEFUL FOR: Prenatal Clinics; Prospective Parents Classes; Postpartum Teaching.

Baker Laboratories, Inc. — **Booth No. 60**
Cleveland, Ohio

You are invited to visit Booth No. 60, where Baker's Modified Milk and Varamel, two successful products for infant feeding, are on display.
Baker representatives will be glad to discuss the practical application of Grade A Milk, adjusted fat composition, zero curd tension, synthetic vitamins and other important factors which help to eliminate many of the problems in modern infant feeding.

Bard-Parker Co., Inc. — **Booth No. 21**
Danbury, Conn.

RACK-PACK . . . gross and half gross units of B-P Rib-Back Surgical Blades ready for sterilization in a matter of seconds. Saves time and labor in the O. R., prevents costly, accidental damage to sharp edges. B-P knife handles, B-P Blade Forceps, B-P Germicide, Chlorophenyl, sterilizing containers, transfer forceps, "C.F." Pipettes and Reese Dermatome.

Barry Laboratories, Inc. — **Booth No. 18**
Detroit, Mich.

Baxter Laboratories, Inc. — **Booth No. 36**
Morton Grove, Ill.

Baxter Laboratories will display the Travert Electrolyte solutions and the Plexitron solution and blood administration equipment. In addition, there will be the INCERT which is the new unique unit for supplementing parenteral solutions. It provides for the addition of vitamins and other supplementary medication to the parenteral solution container without the use of a syringe and needle.

Beech-Nut Packing Company — **Booth No. 64**
New York, N. Y.

Beech-Nut now has a sample size package of cereal. Come to this exhibit to see these new packets as well as to obtain information on—
(1) Baby Foods for the geriatric patient.
(2) Feeding the allergic infant.

Belle Moss Manufacturing Chemist — **Booth No. 40**
Detroit, Mich.

DIAPREX: ointment, for effective treatment and prevention of diaper rash, useful also for adults as well as for children, in heat rash and chafing.
CARBAX: ointment, for relief in all types of eczemas, especially in patients overmedicated with tar and other such preparations.

The Borden Company **Booth No. 76**
New York, N. Y.

There's no better place to talk over the latest information on infant feeding than the Borden Prescription Products booth. On display is the complete line of Borden's infant formula products for every feeding purpose or preference. You can feed almost any baby BREMIL, MULL-SOY (Liquid or Powdered), DRYCO, or BIOLAC.

Brooks Appliance Company **Booth No. 31**
Chicago, Ill.

The Brooks Appliance Company will exhibit and describe in detail the technique of applying the combination pressure bandages. The moist medicated Primer bandage plus the Dalzoflex Elastic Adhesive which are used in treating leg ulcers and phlebitis. Elastic stockings, the Nulast Elastic Crepe bandages and Surgical instruments will also be displayed.

Burdick Corporation **Booth No. 86**
Milton, Wisconsin

The Burdick equipment to be exhibited will feature their new model EK-2 Electrocardiograph and their Ultrasonic Therapy Equipment, as well as Diathermy apparatus.

The new Portable Ultrasonic Unit Model UT-4 will be on demonstration as well as the larger model UT-1. A Burdick factory representative will be on hand to explain these newest additions to the Burdick line.

Burroughs Wellcome & Co. **Booth No. 59**
Tuckahoe, N. Y.

NEW PRODUCTS: The extensive research facilities of B. W. & Co., both here and in other countries, are directed to the development of improved therapeutic agents and techniques.

Through such research B. W. & Co. has made notable advances related to leukemia, malaria, diabetes, and diseases of the autonomic nervous system; and to antibiotic, muscle-relaxant, antihistaminic, and antinauseant drugs.

An informed staff at our booth will welcome the opportunity to discuss our products and latest developments with you.

Cambridge Instrument Co. **Booth No. 95**
New York, N. Y.

The new Cambridge Audio-Visual Heart Sound Recorder; the well-known Cambridge "Simpli-Scribe" Model Direct-Writing Portable Electrocardiograph and the Cambridge Standard String Galvanometer Electrocardiagraph, both in the "Simpli-Trol" Portable and the Mobile Model Electrocardiograph-Stethograph with Pulse Recorder, will be displayed at this booth. Also, other important Cambridge instruments, including the Operating Room Cardioscope, Educational Cardioscope, Multi-Channel Direct-Writing Recorder, Electrokymograph, Plethysmograph, and pH Meters.

The Cambridge Engineers in attendance will be glad to give you complete information on these instruments.

Carnation Company **Booth No. 67**
Los Angeles, Calif.

Carnation Company presents Carnation Instant Nonfat Dry Milk Solids, the *first* and only true instant non-fat dry milk. The "Magic Crystals" process which has resulted in instant solubility and fresh flavor, won the 1955 Food Engineering Award for the year's major advance in food processing. We cordially invite you to sample this fine product; an excellent, economical source of protein.

Central Pharmacal Company **Booth No. 97**
Seymour, Ind.

The exhibit of The Central Pharmacal Company will feature Neocyten, for the relief of pain and muscle spasm; Uritral, an effective antiseptic and analgesic for urinary tract infections; and Biotres, an excellent bactericide and fungicide in ointment form. Literature and full information will be available at the booth.

Ciba Pharmaceutical Products, Inc. **Booth No. 27**
Summit, N. J.

CIBA is featuring RITALIN, a new mild stimulant-antidepressant. RITALIN raises depressed patients to normal levels of psychomotor activity without amphetamine-like overstimulation or depressive rebound. Representatives will be present to answer queries on this effective agent.

Coca-Cola Company **Booth No. 48**
Atlanta, Ga.

Ice-cold Coca-Cola served through the courtesy and co-operation of the Detroit Coca-Cola Bottling Company and The Coca-Cola Company.

DePuy Manufacturing Co. **Booth No. 94**
Warsaw, Ind.

DePuy Manufacturing Company is exhibiting representatives sample of their complete line of splints, fracture equipment, surgical supplies and other related items. The oldest firm in the industry will also have on exhibit many new products. We cordially welcome you to visit with us in our booth, inspect our products, and discuss your problems and ideas with us.

Desitin Chemical Co. **Booth No. 62**
Providence, R. I.

DESITIN OINTMENT: the pioneer in external cod liver oil therapy.

Indications: diaper rash, slow healing wounds, burns of all degrees, lacerations, hemorrhoids and fissures.

DESITIN POWDER: a unique, dainty medicinal powder saturated with cod liver oil.

DESITIN HEMORRHOIDAL SUPPOSITORIES with COD LIVER OIL: coats ano-rectal area with soothing, lubricating cod liver oil, gives prompt relief of pain, allays itching.

DESITIN LOTION: the original cod liver oil lotion, soothing, protective, mildly astringent and heating, in non-specific dermatitis, pruritus, poison ivy, etc.

Detroit Creamery Co. **Booth No. 102**
Detroit, Mich.

Dictaphone Corporation **Booth No. 34**
Detroit, Mich.

For busy doctors, Dictaphone Corporation offers the easiest way in the world to stay ahead of paper work. It's the Dictaphone Time-Master dictating machine with plastic Dictabelt record.

For hospitals, it's the Dictaphone Telecord System, adaptable to existing internal dial telephone systems. Telecord keeps medical records complete and accurate at minimum cost.

Dietene Company **Booth No. 37**
Minneapolis, Minn.

Have YOU tasted MERITENE . . . the whole protein supplement that DOES taste good? Visit our booth, enjoy a MERITENE Milk Shake with its multiple nutritive values.
While you're there, review the Dietene Diet based on DIETENE Reducing Supplement. It provides the rare combination of low calories (1,000) with high intake of protein and all essential vitamins and minerals in an interesting, effective, SAFE weight reducing diet. Now available in INSTANT form also.

Doho Chemical Corp. **Booth No. 6**
New York, N. Y.

DOHO CHEMICAL CORPORATION is pleased to exhibit:
AURALGAN: Ear medication in Otitis Media and removal of Cerumen.
OTOSMOSAN: Effective, non-toxic Fungicidal and Bactericidal (Gram negative-Gram positive) in the suppurative and aural dermatomycotic ears.
RHINALGAN: Nasal decongestant free from systemic or circulatory effect and equally safe to use on infants as well as the aged.
NEW LARYLGAN: Soothing throat spray and gargle for infectious and non-infectious sore throat involvements.
Mallon Chemical Corporation, Subsidiary of the Doho Chemical Corporation, is also featuring:
RECTALGAN: Liquid topical anesthesia, for relief of pain and discomfiture in hemorrhoids, pruritus and perineal suturing.
DERMOPLAST: Aerosol freon propellent spray for fast relief of surface pain, itching, burns and abrasions. Also Obs. & Gyn. use.

Eaton Laboratories, Inc. **Booth No. 92**
Norwich, N. Y.

For the treatment of Trichomonas vaginalis vaginitis and the accompanying secondary bacterial infections, Tricofuron (T.M.) Vaginal Suppositories and Powder are now available.
The latest clinical data on Furadantin® in the form of tablets and as Furadantin Oral Suspension in treating urinary tract infections and prostatitis will be available.

Paul B. Elder Co. **Booth No. 69**
Bryan, Ohio

We cordially invite members of the Michigan State Medical Society and their guests to visit our booth. OXSORALEN® for treatment of vitiligo and RAPAX® Inserts for "timed laxation" will be featured. Our representatives will be glad to discuss BENOQUIN® for treatment of hyperpigmentation and other products of ELDER Research.

Encyclopedia Americana **Booth No. 39**
Grand Rapids, Mich.

We will display our *1956* Edition of Encyclopedia Americana—acknowledged by leading educators as the first, finest, and foremost reference work in the English language. Our records prove that they *prefer* it over all others. Don't forget to register for a beautiful 48-page world atlas in full color—free and without obligation.

Ethicon, Inc. **Booth No. 61**
New Brunswick, N. J.

Ethicon CP Surgical Gut, Tru-Permanized Silk and Other Textile Sutures; Ethicon Atraloc Eyeless Needle Sutures; Bio-Sorb Absorbable Dusting Powder; Gamophen Antiseptic Surgical Soap; Tantalum Gauze & Other Tantalum Surgical Materials; SUTUPAK—Pre-cut Sterile Surgical Silk & Cotton Sutures; Surgical Steel Sutures & Gauze; Surgiset, Pocket Surgiset—Suture Assortments: LIGAPAK—Spiral Wound Sutures; New Ophthalmic Sutures.

H. G. Fischer & Co. **Booth No. 41**
Detroit, Mich.

Latest models of Modern X-Ray Apparatus, F.C.C. approved Ultrasonic Generators, Short Wave Diathermy Units and Low Voltage Generators, all of highest quality materials and construction, will be on display. Representatives in attendance will welcome an opportunity to give demonstrations and quote todays low prices. Your visit will be appreciated.

C. B. Fleet Company, Inc. **Booth No. 7**
Lynchburg, Va.

During the past fifty years, PHOSPHO-SODA (FLEET) has been a symbol of elegance in sodium phosphate medication. FLEET ENEMA DISPOSABLE UNIT—an enema solution of Phospho-Soda (Fleet)—is a worthy companion product. The single-use unit simplifies and assures satisfying preparation for proctoscopy and as a routine enema it is a boon to the hospitalized patient.

Flint, Eaton & Company **Booth No. 46**
Decatur, Ill.

Flint, Eaton presents Ferrolip, a new chelate complex of iron.
Chelated iron, as in Ferrolip, is resistant to all usual chemical forces serving to precipitate iron and to produce iron intolerance; yet the chelated iron in Ferrolip is completely soluble and readily available for uptake along the entire gastrointestinal tract.
Visit the Flint, Eaton & Company booth to hear of chelation as it applies to iron therapy.

E. Fougera & Company, Inc. **Booth No. 47**
New York, N. Y.

E. FOUGERA & COMPANY, Inc. AND DIVISION, VARICK PHARMACAL COMPANY, Inc., cordially invite physicians to discuss with Professional Service representatives new preparations of importance to their everyday practice. Descriptive literature and samples of all products will be available.

Freeman Mfg. Company **Booth No. 72**
Sturgis, Mich.

The Freeman line of Surgical Supports places particular emphasis on orthopaedic braces for use when conservative measures are indicated. Rigid control and almost complete immobilization of the sacral, lumbar and thoracic area is achieved through the use of splint type construction in combination with the block and tackle effect of straps and buckles. Special designs and constructions are available for any purpose.

Geigy Pharmaceuticals **Booth No. 78**
New York, N. Y.

MEDOMIN—a new kind of barbiturate—will highlight the GEIGY Exhibit. Indicated for safe, gentle hypnosis and reliable, sustained sedation, MEDOMIN is unique in that a 7-member ring is attached to the barbiturate radical. Also featured will be BUTAZOLIDIN, nonhormonal anti-arthritic; HURAX, antipruritic and scabicide; and STEROSAN, bacteriostat and fungistat.

General Electric Company **Booth No. 74**
Detroit, Mich.

X-Ray Department, General Electric Company, manufacturers of complete X-Ray equipment from portable diagnostic to 2,000,000 volt therapy apparatus—electrocardiograph — diathermy — X-Ray accessories and supplies. X-Ray equipment of new design will be shown for the first time at your meeting. We are looking forward to seeing you.

Gerber Products Company **Booth No. 35**
Fremont, Michigan

WHEN MILK IS CONTRAINDICATED as the basic food for infants, Gerber "Meat Base Formula" can provide a nutritionally adequate replacement. It is well accepted and tolerated by infants of all ages. Your Gerber detailman invites you to evaluate "Meat Base Formula" and the complete line of supplementary baby foods.

Hack Shoe Company **Booth No. 3**
Detroit, Mich.

RIPPLE SOLES, "The Shoes That Walk For You" will highlight this exhibit.

Doctors and their guests will be invited to try them on so that they may experience the unusual comfort of these cushion-soft shoes.

Other Hack Shoes displayed will include supportive shoes for men and women and regular as well as prescription shoes for children.

J. F. Hartz Co. **Booth No. 66**
Ferndale, Mich.

Surgical instruments, diagnostic and office equipment. Pharmaceutical specialties of our own manufacture.

H. J. Heinz Co. **Booth No. 10**
Pittsburgh, Pa.

What's New??? These Heinz Varieties—

Strained Foods—Bananas, Creamed Spinach, Macaroni, Tomatoes, Beef & Bacon, Split Peas—Vegetables & Bacon, Egg Yolk.

Junior Foods—Creamed Carrots, Teething Biscuit, Green Beans & Potatoes. Junior Dinner—Vegetables & Lamb; Junior Dinner—Vegetables & Liver.

All Heinz Baby Foods are glass packed except Strained Orange Juice, Teething Biscuits and four Pre-Cooked Cereals.

Literature—Booklet for Mothers—"A Feeding Guide for a Healthy Happy Baby" and for you—Nutritional Data.

Hoffmann-LaRoche, Inc. **Booth No. 49**
Nutley, N. J.

Holland-Rantos Co., Inc. **Booth No. 16**
New York, N. Y.

Physicians interested in Medical Contraception are invited to discuss with H-R representatives latest information on laboratory and clinical data concerning efficacy of KOROMEX products, particularly the unique new KORO-FLEX Diaphragm.

Also on exhibit will be the trichomonacidal, fungicidal and bactericidal NYLMERATE Jelly and Solution Concentrate, as well as medicated HOLLANDEX Ointment with silicone base and natural vitamin A and D.

G. A. Ingram Co. **Booth No. 87**
Detroit, Mich.

THE G. A. INGRAM COMPANY will, as usual, have many new items of interest on display in space 87, and the salesmen in charge of this exhibit will be in a position to give you full information regarding both the new items as well as all other equipment on display. We shall look forward with pleasure to having you stop at our booth to say "hello."

Instant Sanka Coffee **Booth No. 5**
White Plains, New York

Just as often as you wish between your meetings, stop by for a cup of INSTANT SANKA. This is 100% pure coffee with 97% of the caffeine removed. And be sure to pick up some samples for a nightcap in your room, and to register for professional samples and copies of the booklet, What Every Coffee Lover Should Know About Caffeine.

C. B. Kendall Co. **Booth No. 77**
Indianapolis, Ind.

The C. B. Kendall Company is featuring two recent releases which have already been favored with impressive acceptance. The staff in attendance will welcome an opportunity to detail the qualities of these products.

Kenfre Mfg. Company **Booth No. 96**
Grand Rapids, Mich.

AUDIVOX, INC. Successor to *Western Electric* Hearing Aid Division. *"The Hearing Aid Your Doctor Knows."* **Audiometers:** Diagnostic, Screening, Pure-Tone, Speech; custom-engineered to individual needs of doctors, hospitals, schools, clinics or industry, **Lectron-O-Scope,** electronic stethoscope for earlier, more complete diagnosis. **Scottie,** pocket-sized telephone amplifier. **Electro-Larynx,** talking device for laryngectomees.

Kremers-Urban Company **Booth No. 50**
Milwaukee 1, Wisconsin

The KREMERS-URBAN booth will feature the most potent visceral antispasmodic LEVSIN SULFATE . . . SALIMEPH-C with its ACTH-like anti-rheumatic activity, but without side effects . . . NITROL TABLETS-OINTMENT for the prevention of anginal attacks and AMITRATE for coronary insufficiency.

A. Kuhlman & Co. **Booth No. 38**
Detroit, Mich.

The A. Kuhlman & Co., celebrating its ninetieth year in the physicians and hospital supply business in Detroit, invites you to see its display of the latest diagnostic and surgical instruments as well as examining room furniture and physical therapy equipment.

Lea & Febiger **Booth No. 89**
Philadelphia, Pa.

Be sure to see these 1956 and other recent books: Wintrobe—Clinical Hematology; Wohl and Goodhart —Modern Nutrition in Health and Disease; Soffer—Diseases of the Endocrine Glands; Zimmerman, Netsky and Davidoff—Atlas of Tumors of the Nervous System; Katz and Pick—Clinical Electrocardiography; Master, Moser and Jaffe—Cardiac Emergencies and Heart Failure; Lewin—The Back and Its Disk Syndromes; Ritvo—Chest X-Ray Diagnosis; Stimson—Fractures; Cushman—Strabismus; Epstein—Skin Surgery.

Lederle Laboratories **Booth No. 30**
Pearl River, N. Y.

You are cordially invited to visit the Lederle booth where our medical representatives will be in attendance to provide the latest information and literature available on our line.

Featured will be Achromycin, Diamox, Vitamins, Pathilon, Varidase and many other of our dependable products.

Liebel-Flarsheim Company **Booth No. 15**
Cincinnati, Ohio

The Liebel-Flarsheim Company cordially invites you to visit the booth in which their latest electromedical-electrosurgical equipment will be exhibited. We ask particularly that you stop and see the L-F Basal-MeteR, the first automatic, self-calculating metabolism unit ever offered. Capable representatives will be on hand at all times.

Eli Lilly & Company **Booth No. 91**
Indianapolis, Ind.

You are cordially invited to visit the Lilly exhibit located in space No. 91. The display will contain information on recent therapeutic developments. Lilly sales people will be in attendance. They welcome your questions about Lilly products.

J. B. Lippincott Co. **Booth No. 17**
Philadelphia, Pa.

J. B. Lippincott Company presents, for your approval, a display of professional books and journals geared to the latest and most important trends in current medicine and surgery. These publications, written and edited by men active in clinical fields and teaching, are a continuation of more than 100 years of traditionally significant publishing.

Maico Detroit Company **Booth No. 88**
Detroit, Mich.

The new Maico Hearing Aid weighing less than one-half ounce is so small that the entire unit consisting of transmitter, microphone, receiver, battery and ear mold is worn in the ear. A complete line of instruments to take care of cases from the borderline to the profoundly deaf.
90% of all precision hearing test instruments used in America by ear physicians are Maico.

Maltbie Laboratories Division **Booth No. 44**
Belleville, N. J.

You are cordially invited to visit the Maltbie Exhibit to meet our representatives and discuss our ethical pharmaceutical products. Featured items will be DESENEX and SALUNDEK, the well-known fungicides; CHOLAN HMB, for comprehensive biliary therapy; MALCOTRAN, the potent anticholinergic with wide margin of safety; and CALPURATE, for improved cardiac function and increased diuresis.

S. E. Massengill Co. **Booth No. 55**
Bristol, Tenn.

SALCORT, a judicious combination of Salicylates and Cortisone for the treatment of arthritic and rheumatoid affections.

and

HOMAGENETS, the homogenized vitamins. A liquid suspension in a solid form, Homagenets may be chewed, swallowed or allowed to dissolve on the tongue. Homogenized vitamins are better absorbed, better utilized and large vitamin excesses are unnecessary.

Mead Johnson & Co. **Booth No. 90**
Evansville, Indiana

The new Deca vitamin family for the vital first decade of life will be exhibited by Mead Johnson & Company in Booth No. 90. Included in the new Deca family of vitamin specialties are: Deco-Vi-Sol, for dropper dosage, a fruit flavored solution for infants and toddlers; Deca-Mulcin, for teaspoon dosage, a pleasantly-flavored liquid for preschool children of 2 to 6 years; and Deca-Vi-Caps, small, easily-swallowed capsules, for school-agers of 6 to 10 years. All three Deca vitamin specialties supply 10 nutritionally significant vitamins including A, C, and D, plus 7 important B vitamins.

Medco Products Co. **Booth No. 100**
Tulsa, Okla.

Featuring the MEDCO-SONLATOR. A new concept in therapy, combining muscle stimulation and ultrasound simultaneously through a SINGLE three way sound applicator.
The MEDCO-SONLATOR is a distinct advance in the effectiveness of physical therapy in your office or hospital. A few minutes spent in our booth should prove of value to your practice.

Medical Arts Supply Co. **Booth No. 79**
Grand Rapids, Mich.

Your friendly, competent Medical Arts representatives invite you to see the latest in modern furniture and equipment as well as a number of dramatic new developments in medical and surgical techniques and materials. Stop by and let us say, "Hello."

Medical Protective Company **Booth No. 20**
Fort Wayne, Ind.

MALPRACTICE PROPHYLAXIS. Policyholders of The Medical Protective Company are in less jeopardy from malpractice claims and suits today than they have been for the past thirty years. In fact, 1955 brought less than half as many claims and suits as were filed against fewer policyholders twenty years ago. Specialized Service makes our doctor safer.

Merck Sharp & Dohme, Inc. **Booth No. 29**
Philadelphia, Pa.

The Sharp & Dohme exhibit presents "Co-Deltra" and "Co-Hydeltra," specifically designed to provide all the benefits of prednisone and prednisolone plus positive antacid action to minimize gastric distress. Related adrenal cortical steroid preparations in endocrine disorders, collagen diseases, respiratory allergies, eye diseases and skin conditions are also highlighted.
"Cathomycin," a new and potent antibacterial agent of great clinical significance, will be of interest. "Cathomycin" has been proved highly efficient in its action against Staphylococci and some strains of Proteus vulgaris resistant to all other known antibiotics. Expertly trained personnel will be pleased to discuss new dosage forms, new indications, and the latest summaries of advanced clinical reports in these fields.

Wm. S. Merrell Co. **Booth No. 26**
Cincinnati, Ohio

Merrell representatives will be on hand to discuss TACE, a new distinctive estrogen and Meratran, a new unique antidepressant.
Please stop at Booth No. 26, where our representatives will be happy to talk with you.

Meyer and Company **Booth No. 43**
St. Clair Shores, Mich.

ATHEMOL: A new compound for the treatment of arteriosclerosis and its consequences: arterial hypertension, cerebral sclerosis, coronary sclerosis, ringing in the ears, faintness and difficulties of hearing, headaches and general afflictions of aging people, climacteric difficulties, et cetera.
DEXALME L.A.: The timed disintegrating capsules which release 10 or 15 mg. of dextro amphetamine over a period of nine hours.
TESTALDIOL BUCCAL TABLETS: METHYL TESTOSTERONE and ESTRADIOL in buccal absorption tablets.

Michigan Medical Service **Booth No. 4**
Detroit, Mich.

The Blue Shield exhibit exemplifies the prepayment plan sponsored by the doctors of Michigan and what that plan means to the people of the state. The family scene is typical of a family which has been relieved of the worry of catastrophic medical bills.
The photograph of the doctor and the child which makes up the Blue Shield portion of the exhibit is symbolic of the co-operation of the doctors of Michigan. Through that co-operation, Blue Shield in Michigan has led the nation in meeting the needs of the public.

Miller Surgical Company **Booth No. 68**
Chicago, Ill.

See the Miller explosion proof Gorsch Operating Rectoscopes with attached tubes for insufflation of carbon dioxide to prevent intrabowel explosions during electro-surgery. The popular Miller Electro-Surgical Units with Snares, Suction-Coagulation attachments, Forceps and other special accessories will also be featured as well as our illuminated Otoscopes, Ophthalmoscope, Eyespud with Magnet, Transilluminating Lamps, Lempert type Headlite, Vaginal Speculum with Smoke Ejector and Gorsch Stainless Steel Proctoscopes with Magnification.

Nepera Chemical Co., Inc. **Booth No. 80**
Yonkers, N. Y.

The Nepera exhibit features a new drug, Choledyl, which has been highly effective in the treatment of bronchial asthma, bronchospasm and congestive heart failure. Choledyl assures high oral theophylline blood levels, with minimal side reactions; it rarely produces fastness.

Also featured—Urosulfin, a new product, which is a combination of a well-known soluble sulfonamide for antibacterial effect and a widely-used azo dye for rapid symptomatic relief of pain, burning, frequency, etc., in the treatment of urinary infections, especially cystitis of pregnancy.

Mandelamine, a urinary antiseptic.

Wm. R. Niedelson Co. **Booth No. 1**
Detroit, Mich.

The Jones AIR-BASAL—the Profexray ROCKET series and other diagnostic equipment in the latest designs will be demonstrated. Ultrasound equipment and techniques will be fully described to those interested in the newest modality in Physio-Therapy today.

Noble-Blackmer, Inc. **Booth No. 32**
Jackson, Mich.

It is a pleasure to look forward to September and the Michigan State Medical Society Convention when we will once again be able to say "Hello" to our many doctor friends. Our exhibit this year will be in Booth 32 in the first room. Please stop in and see us.

Ortho Pharmaceutical Corporation **Booth No. 8**
Raritan, N. J.

ORTHO cordially invites you to Booth No. 8 where the well-known line of obstetrical and gynecological pharmaceuticals will be on display. Particular emphasis will be placed on Ortho preparations for conception control. Ortho representatives will be on hand to offer pertinent information on their products.

Parke, Davis & Co. **Booth No. 14**
Detroit, Mich.

Medical service members of our staff will be in attendance at our exhibit for consultation and discussion of various products. Important specialties, such as Penicillin S-R, Benadryl, Ambodryl, Dilantin Suspension, Vitamins, Oxycel, Milontin, Amphedase, Chloromycetin, Thrombin Topical, etc., will be featured. You are cordially invited to visit our exhibit.

Pelton & Crane Company **Booth No. 82**
Charlotte, N. C.

Fast autoclaves in three sizes will be demonstrated and explained. Pelton autoclaves are the only self-contained (not connected to plumbing) units that generate, then store steam under pressure to be drawn on whenever you wish to sterilize. No waiting time between loads. One filling with water is usually sufficient for 8 hours of continuous operation.

Pet Milk Company **Booth No. 22**
St. Louis, Mo.

We shall be pleased to have you stop and discuss the variety of time-saving material available to busy physicians. Our representatives will be on hand to discuss the merits of "Pet" Evaporated Milk for infant feeding and INSTANT "Pet" Nonfat Dry Milk for special diets. A miniature "Pet" Evaporated Milk can will be given to all visitors.

Pfizer Laboratories **Booth No. 84**
Brooklyn, N. Y.

The Pfizer exhibit again will be in the spotlight with its new and original concept of anti-stress, anti-infective therapy—TETRACYN S. F. and TERRAMYCIN S. F. (Stress Fortified). Also the complete line of Pfizer antibiotics and STERAJECT as well as the new specialties, BONAMINE, TYZINE, TOCLASE and the complete line of steroid hormones including CORTRIL and the latest corticosteroid STERANE (brand of prednisolone).

Picker X-ray Corporation **Booth No. 53**
White Plains, N. Y.

"Dial-the-part" automation distinguishes the new Picker Anatomatic Century II x-ray unit. Simple to use, it eliminates the need for technique charts or manual setting of separate technique factors. The operator merely "dials" the body part, makes a simple thickness-of-part setting, and pushes a button for the exposures. Coupled with this control is a new full size motor-driven table with a single x-ray tube quickly changed over from fluoroscopy to radiography.

Procter and Gamble Company **Booth No. 25**
Cincinnati, Ohio

Ivory Soap (Procter & Gamble) offers a series of time-saving leaflet pads for doctors, each pad containing fifty identical tear-out sheets. These sheets which may be given to patients, contain routine instructions covering six different topics. There are also samples of other free, helpful material prepared especially for physicians.

Mrs. Christyne Schwab in charge.

Professional Management **Booth No. 85**
Battle Creek, Mich.

PM

PROFESSIONAL MANAGEMENT MORE INCOME—MORE FREEDOM FROM DETAIL — MORE LEISURE TIME — BETTER PATIENT MANAGEMENT—BETTER PUBLIC RELATIONS

Doctors interested in attaining any of these objectives are invited to stop at Booth No. 85 and talk with the PM executives. Since 1932 their management counsel has helped thousands of physicians.

Purdue Frederick Company **Booth No. 98**
New York, N. Y.

The Purdue Frederick Company will feature

SENOKOT—new non-bulk, non-irritating constipation corrective acting selectively on the parasympathetic (Auerbach's) plexus in the large bowel, physiologically stimulating the neuromuscular defecatory reflex.

PRE-MENS—the multidimensional premenstrual tension therapy.

COLPOTAB—a tested effective Tyrothricin trichomonacide; and

CHLOROGIENE—a hygienic douche formulation.

Randolph Surgical Supply Co. **Booth Nos. 51, 52**
Detroit, Mich.

R. J. Reynolds Tobacco Co. **Booth No. 81**
Winston-Salem, N. C.

Welcome to the R. J. Reynolds Tobacco Company Exhibit! You are cordially invited to receive a cigarette case (monogrammed with your initials) containing your choice of CAMEL, CAVALIER King Size, or WINSTON, the distinctive new king size filter cigarette.

A. H. Robins Co., Inc. **Booth No. 63**
Richmond, Va.

Physicians attending the meeting of the Michigan State Medical Society are extended a cordial invitation to visit the exhibit of the products of the A. H. Robins Company. Experienced medical representatives will be in attendance to welcome you and answer inquiries relative to any of Robins prescription specialties.

J. B. Roerig & Co. **Booth No. 45**
Chicago, Ill.

J. B. ROERIG AND COMPANY, booth 45, will highlight ATARAX, the new "Peace of Mind" drug. It's an all new chemical and is considered an achievement in the quest for a better ataraxic. ATARAX is particularly indicated for the "more normal" person and brings relief from the common everyday anxieties and annoyances. It is quick acting yet requires low mg. dosage; does not disturb the mental acuity of the patient and has virtually no known side effects. Literature and samples available at the booth, which you and your friends are cordially invited to visit.

Ross Laboratories **Booth No. 11**
Columbus, Ohio

ROSS LABORATORIES: Current concepts in infant feeding stress the critical aspects of preventive care. Visit our booth at your convenience; your Similac representative will be happy to discuss the physiologic role of Similac Powder and Similac Liquid in providing good growth, sound development, and optimum clinical benefits. Reprints of current pediatric investigations and the latest Ross Research Conference Reports are available.

Sandoz Pharmaceuticals **Booth No. 56**
Hanover, N. J.

W. B. Saunders Company **Booth No. 2**
Philadelphia, Pa.

Harold Rozema will again be on hand with the complete Saunders line. Among the newest of special interest are: Friedberg: Diseases of the Heart, Pillsbury: Dermatology, Fluhmann: Menstrual Disorders and Modell: Relief of Symptoms.

Schering Corporation **Booth No. 19**
Bloomfield, N. J.

A cordial invitation is extended to the members of the Michigan State Medical Society to visit the Schering exhibit, Booth No. 19. The entire exhibit will be devoted to METICORTEN and METICORTELONE, the new corticosteroids for the treatment of rheumatoid arthritis, intractable asthma and other so-called collagen diseases. Extensive clinical and laboratory data demonstrating certain advantages of these new steroids over cortisone and hydrocortisone are shown.

Julius Schmid, Inc. **Booth No. 70**
New York, N. Y.

An interesting and informative exhibit featuring RAMSES Flexible Cushioned Diaphragm; RAMSES Vaginal Jelly; VAGISEC Jelly and Liquid, two new products embodying "Carlendacide," the recent development of Carl Henry Davis, M.D., and C. G. Grand for vaginal trichomoniasis therapy; and XXXX (FOUREX) Skin Condoms, RAMSES and SHEIK Rubber Condoms for the control of trichomonal reinfection.

G. D. Searle & Co. **Booth No. 93**
Chicago, Ill.

You are cordially invited to visit the Searle booth where our representatives will be happy to answer any questions regarding Searle Products of Research.
Featured will be Nilevar, the new anabolic agent; Mictine, the new safe, non-mercurial oral diuretic; Vallestril, the new synthetic estrogen with extremely low incidence of side reactions; Banthine and Pro-Banthine, the standards in anti-cholinergic therapy; and Dramamine, for the prevention and treatment of motion sickness and other nauseas.

Smith, Kline & French Labs. **Booth No. 23**
Philadelphia, Pa.

Have you ever wondered why "Thorazine" is indicated in so many seemingly unrelated conditions? If you will stop at our booth, SKF Representatives will be glad to answer this question for you. And be sure to ask for new information on "Cytomel"—the modern method of treating the syndrome of metabolic insufficiency. We'll look forward to seeing you.

Testagar & Co., Inc. **Booth No. 33**
Detroit, Mich.

The representatives of Testagar & Co., Inc., will display five new timed disintegrating capsules: Timed Amodex, Timed Tridex, Timed Bar-Tropin, Timed Pyma, and Timed Pymadex Capsules. Samples and literature will be available. They will also have samples and literature on a very new skeletal muscle relaxant, Myomephetane, and a new oral procaine product, Ascorbacaine Capsules used in the treatment of Pruritus. The representatives of Testagar & Co. will be very happy to say Hello. Stop by.

S. J. Tutag & Co. **Booth No. 71**
Detroit, Mich.

Tutag is proud to present Buffonamide, the triple sulfa that is buffered. The use of sodium citrate as buffering agent with the acetdiamer-sulfonamides makes Buffonamide ideal; this formula is less toxic, well-tolerated, readily absorbed, with increased crystalluria protection. The pleasant cherry flavoring of this suspension makes Buffonamide the drug of choice for all ages.
Another featured item will be Tutag's Parazine (brand of Piperazine Citrate) which is an excellent pleasant tasting liquid used in the control of pinworms and roundworms. Parazine eliminates the adjunctive use of fasting, enemata and purges. It is well tolerated and effective. Also available in tablet form.

The Upjohn Company **Booth No. 54**
Kalamazoo, Mich.

The Upjohn Company exhibit in Booth No. 54 will feature products of current interest to the medical profession. You are especially invited to attend the continuous showing of the Grand Rounds films. Acute

abdominal Problems and The Cardiac Patient in Stress, in the "Upjohn Cinema Room" beginning at 9:00 A.M. through 5:00 P.M. daily.

U. S. Vitamin Corp. **Booth No. 65**
New York, N. Y.

Exhibit features ARLIDIN, an entirely new, relatively safe and effective vasodilator drug with three unique pharmacologic actions: (1) dilates predominantly small blood vessels of skeletal muscle, (2) increases circulating blood volume, (3) increases cardiac output. Thus, ARLIDIN (Nylidrin HCl. MNR) is indicated in treating intermittent claudication and a wide range of functional and obliterative disorders of peripheral vascular insufficiency.
Professional samples and literature distributed also on our complete line of nutritional and pharmaceutical specialties.

Warner-Chilcott Laboratories **Booth No. 83**
New York, N. Y.

A visit to the Warner-Chilcott booth will pay dividends, especially in the interests of your cardiovascular patients. The company is featuring two "clinically tested and proven agents": one to help you prevent attacks of angina pectoris: the other, the most potent drug currently available for reduction of blood pressure in hypertensive patients.

Westwood Pharmaceuticals **Booth No. 57**
Buffalo, N. Y.

White Laboratories **Booth No. 42**
Kenilworth, N. J.

Stimulate appetite—improve muscle tone—speed convalescence through a more efficient utilization of protein. "Correct proportion of amino acids to each other in the diet is more important than total protein intake." White's L-lysine preparations—LACTOFORT, CEROFORT TABLETS and CEROFORT ELIXIR—raise milk, cereal and vegetable proteins to high values.

Winthrop Laboratories, Inc. **Booth No. 73**
New York, N. Y.

New A.P.C.-Demerol tablets for protentiated pain relief. Each tablet contains aspirin 3 grains, phenacetin 2½ grains, caffeine ½ grain with demerol hydrochloride 30 mg. A.P.C.-Demerol tablets combine marked potentiation of analgesia with mild sedation and spasmolytic action. They do not cause constipation nor interference with micturition.

Zimmer Mfg. Co. **Booth No. 24**
Toledo, Ohio

Mr. C. A. Fisher, your Zimmer Distributor, extends most cordial invitation to the members of the Michigan State Medical Society to visit his exhibit at BOOTH 24.
A complete line of Orthopedic Instruments and Fracture Equipment will be on display. Items of special interest, BADGLEY NAIL AND PLATE, TOWNLEY CUP STEM PROSTHESIS, SCHNEIDER SELF-BROACHING INTRAMEDULLARY PINS, TITANIUM IMPLANTS, EXPLOSION PROOF LUCK BONE SAW AND BROWN-ELECTRO DERMATONE (underwriters approved), MYO-CERVICAL COLLAR.
ZIMMER, your guarantee of quality and prompt service.

HOTEL RESERVATIONS

MICHIGAN STATE MEDICAL SOCIETY

91st Annual Session

Detroit, September 26-27-28, 1956

The reservation blank below is for your convenience in making your hotel reservations in Detroit. Please send your application to the Committee on Hotels for MSMS Convention, Att: B. Van DeKeere, Sheraton-Cadillac Hotel, Detroit, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant, when convenient.

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Committee on Hotels,
Michigan State Medical Society
c/o Sheraton-Cadillac Hotel
Detroit, Michigan Att: B. Van DeKeere

Please make hotel reservation(s) as indicated below:

_____ Single Room(s) _____ persons

_____ Double Room(s) for _____ persons

_____ Twin-Bedded Room(s) for _____ persons

Arriving September _____ hour _____ A.M. _____ P.M.

Leaving _____ hour _____ A.M. _____ P.M.

Hotel of First Choice: _____

Second Choice: _____

Name and addresses of all applicants including person making reservation:

Name	Address	City	State
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Date _____ Signature _____

Address _____ City _____

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

POLIO IMMUNIZATION PROGRAM BROADENED

On the recommendation of the State Advisory Committee on Polio Vaccine Distribution, Rule 8 of the Rules and Administrative Policies Governing the Distribution and Use of Poliomyelitis Vaccine was amended as of June 26 to permit third doses to persons within the priority group. The priority group remains children from one through fourteen and pregnant women, with the age of the boy or girl at the time of first injection the deciding factor as to whether he or she is in the priority group.

The only limitation on third doses to the priority group is that the third dose will not be given until at least six months after the second dose. The third dose boosts the immunity level most effectively if it is given at least six months after the second dose.

A second change was made in Rule 8. Hospitals providing definitive treatment for acute poliomyelitis cases may purchase poliomyelitis vaccine for administration to persons who are providing direct care to patients with acute poliomyelitis.

POLIO VACCINE NOW RELEASED THROUGH COMMERCIAL CHANNELS

A portion of each allocation of poliomyelitis vaccine to Michigan is now being released through commercial channels. This does not materially affect the poliomyelitis vaccination program.

1. The amount of vaccine purchased by the Michigan Department of Health plus the amount going to commercial channels in Michigan will still amount to 4.308 per cent of all vaccine released by the Public Health Service. Previously the Michigan Department of Health was purchasing the entire 4.308 per cent.

2. Each health jurisdiction will continue to be offered their proportionate share of all vaccine purchased by the Michigan Department of Health.

3. All vaccine coming into Michigan, whether for local purchase or for distribution by local health departments, will still have to be used within the current priority group.

4. Physicians will continue to complete and send to the local health department a vaccine usage card, whether the vaccine used is material purchased by him or material supplied to him by the local health department. These vaccine usage cards will be supplied by the local health department.

5. Drug stores and surgical supply houses will report weekly to the local health departments the amount of vaccine received by them during the week and the amount of vaccine sold during the week, giving the date of sale, the name and address of the purchaser, the name of the manufacturer, the lot number, and the number of ccs. sold to each purchaser. This will be reported to local health departments on form PHS 2434 and after the local health department has made a note of this information, form PHS 2434 should be sent to the Division of Disease Control, Records and Statistics.

6. The manufacturer will, on a daily basis, provide the Michigan Department of Health with copies of invoices covering any shipments made directly to physicians within the state. The Michigan Department of Health in turn will transmit this information to the local health departments into whose jurisdiction the vaccine was shipped.

SPECIAL TB AND VD SURVEYS PLANNED

Special TB and VD surveys to be conducted during July and August include a program in the Traverse City area from July 23 through August 10. This will be sponsored by the Michigan Cherry Growers Association. It is estimated that approximately 15,000 to 20,000 persons will be in the cherry orchards during the time that the survey is in operation.

For the third year, x-ray service will be provided to the Merchant Marine at the Soo Locks through the Lake Carriers' Association and the Public Health Service. It will begin on August 13 and extend through August 30. Screening films are taken while the ships are passing through the Locks and the men come in groups of five to eight and return immediately to their ships.

VAN BUREN SCREENING RESULTS REPORTED

In the migrant labor TB and VD screening program carried on in Van Buren County from June 12 to 21, a total of 1,345 X-ray films were taken. Suspect abnormalities totalled twenty-six, of which thirteen were suspect reinfection TB, five were suspect cardiovascular and one was a suspect neoplasm. Abnormalities were reported daily by telephone to the Van Buren County Health Department and patients were transported to the Southwestern Michigan TB Sanatorium for re-evaluation and 14 x 17 films.

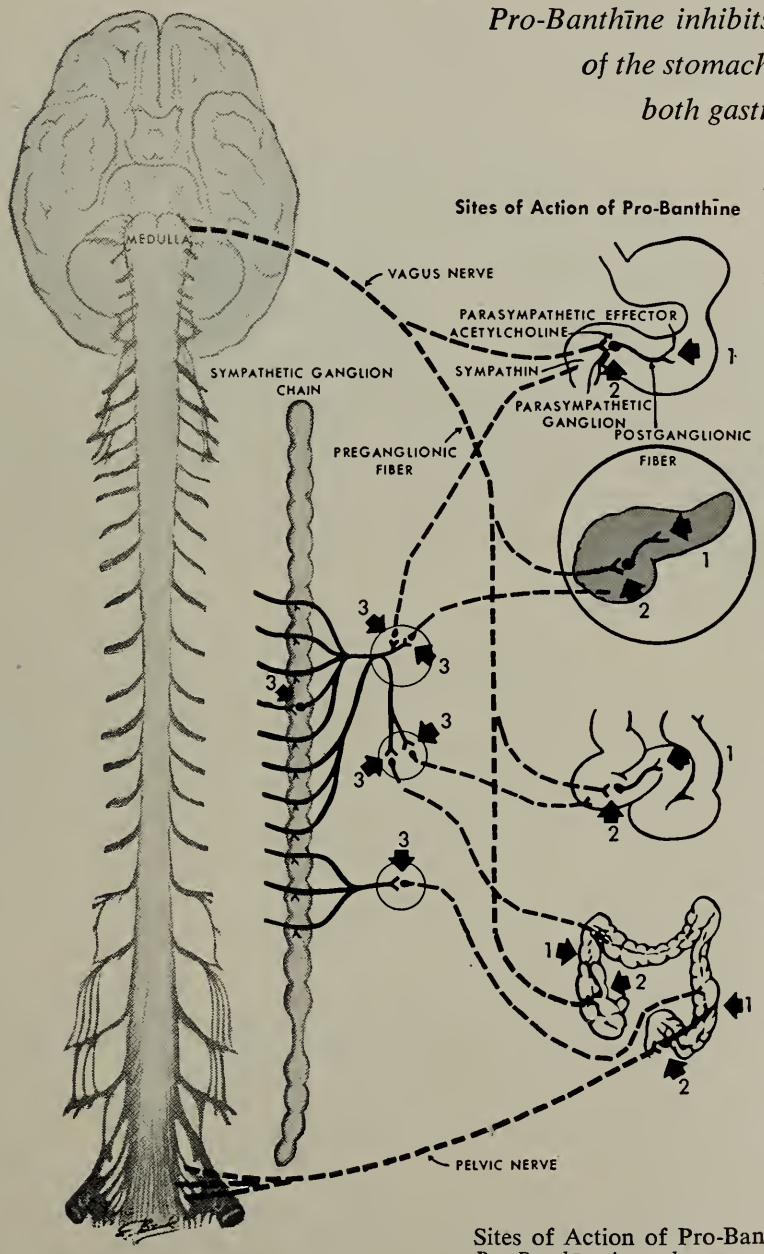
A total of 1,147 persons had blood tests. Of these, fifteen were reported positive or doubtful.

About 57 per cent of population of Greater New York area is enrolled in New York City Blue Cross. Plan added 411,799 subscribers during 1955, bringing total enrollment to 6,168,968. During year subscribers received benefits valued at $107,873,577, bringing total benefits given since plan was founded in 1935 up to $684,353,562. Operating expenses were eight per cent.

PROVED ANTICHOLINERGIC EFFICIENCY

Pro-Banthīne® Provides Rapid Relief in Acute Pancreatitis

Pro-Banthīne inhibits excessive vagal stimulation of the stomach and pancreas and reduces[1,2] both gastric and pancreatic secretions.



With use of the Levin tube and a drug "such as Pro-Banthīne . . . most cases of acute pancreatitis[3] will subside in a few hours, or at the most, in a few days."

Schwartz and Hinton achieved[4] dramatic relief of pain in four of six patients with acute hemorrhagic or edematous pancreatitis within twenty to thirty minutes after giving Pro-Banthīne intramuscularly. A dose of 15 to 30 mg. may be repeated[1] parenterally at intervals of six hours.

Pro-Banthīne bromide (brand of propantheline bromide) also has proved highly effective in the therapy of peptic ulcer, hypertrophic gastritis, diverticulitis, biliary dyskinesia, ileostomies and genitourinary spasm. G. D. Searle & Co., Research in the Service of Medicine.

1. Jones, C. A.: Arch. Int. Med. *96*:332 (Sept.) 1955.
2. Zollinger, R. M.: Postgrad. Med. *15*: 323 (April) 1954.
3. Woodward, E. R.: M. Clin. North America *38*:115 (Jan.) 1954.
4. Schwartz, I. R., and Hinton, J. W.: Personal communication, February, 1955.

Sites of Action of Pro-Banthīne. *The principal site of action of Pro-Banthīne is on the parasympathetic system where it exerts a dual action while exerting a single and lesser action on the sympathetic system: (1) parasympathetic effector; (2) parasympathetic ganglion; (3) sympathetic ganglion (see arrows).*

SEARLE

In Memoriam

Clark D. Brooks, M.D., seventy-eight, widely-known Detroit surgeon and member of Detroit Board of Education 1939-1953. Born in Oakland County, attended public schools in Birmingham, and earned his medical degree in 1905 from Detroit College of Medicine and Surgery, now Wayne State University College of Medicine. Interned at Harper Hospital, where he was associated throughout his career. Major, Army Medical Corps in World War I. Died suddenly in his office May 28, 1956.

Thies C. DeYoung, M.D., sixty-two, of Sparta. Born in Grand Rapids, graduated from Michigan State University and Loyola University Medical School, Chicago. Interned at St. Mary's Hospital, Grand Rapids, and practiced in Sparta since 1929. Village health officer since 1930. A son, Maynard DeYoung, M.D., associated in practice from January, 1956. Died suddenly April 10, 1956.

Lester J. Harris, M.D., eighty-four, one of Jackson's oldest practicing physicians. A native of Tompkins Center, past president of Jackson County Medical Society and holder of MSMS 50-Year Award. Chairman of the Board and former President of the Security Savings & Loan Association; Charter Member of the Jackson Exchange Club and former State President of Exchange. Died April 26, 1956.

F. Pitkin Husted, M.D., fifty-one, of Bay City, President-elect of Bay County Medical Society, established surgical practice in Bay City in 1933, following four years on the staff of University Hospital, Ann Arbor. Born in Massachusetts, graduated from Highland Park High School, Syracuse University, and University of Michigan Medical School. Served five years in Army Medical Corps during World War II, overseas in Africa and Europe, attaining rank of Colonel. Following war service, spent a year in postgraduate residency and cancer research at University Hospital. Died unexpectedly May 17, 1956, while visiting in Miami Beach, Fla.

Dale M. King, M.D., eighty-one, well-known Detroit psychiatrist. Born in St. Thomas, Ont. Attended Western Medical School, London, Ont.; University of Michigan Medical School, and Cleveland University School of Medicine, where he was graduated in 1896. Further study at Ohio State University Medical School. Established practice in mental and nervous diseases in Detroit in 1906 after 10 years of general practice in Mount Pleasant. Associated with Receiving Hospital until retirement in 1940; earlier held clinic in mental diseases at Grace Hospital 1907-1917. Died April 29, 1956.

Torrance Reed, M.D., sixty-six, physician and surgeon in Grand Rapids for thirty-six years. Native of Chicago, graduated from high school in Grand Rapids and received M.D. degree in 1912 from University of Illinois. Overseas veteran of Army Medical Corps in World War I. Died April 26, 1956.

Dwight F. Scott, M.D., forty-eight, Sault Ste. Marie obstetrician. Born in Chicago, received both his undergraduate and medical schooling at Northwestern University, earning his M.D. degree in 1934. Interned in Wesley Memorial Hospital, Chicago, and entered private practice at the Sault in 1936. Died May 2, 1956.

Joseph H. Sherk, M.D., seventy-three, prominent physician in Midland, where he had practiced since 1915. Established first practice at St. Ignace in 1906, following graduation from Detroit College of Medicine (Wayne State University College of Medicine). Born in Ontario. Charter member of Midland Rotary Club and active in many civic affairs; member of Board of Education 1922-1934, Planning Commission 1926-1948. Midland County Medical Society nominee for "Michigan's Foremost Family Physician of 1956." Died suddenly June 8, 1956.

David L. Treat, M.D., eighty-two, of Flint, former Postmaster of that city and a resident there since 1916. Born in Adrian; received A.B. and M.D. degrees from Ohio State University. After graduation, practiced 18 years in Adrian, where he served three terms as Mayor and was President of the National Bank of Commerce. Dr. Treat moved to Flint in 1916 as chief surgeon of the Buick Company, a post which he held until entering private practice in 1932. Flint postmaster from 1934 until his retirement in 1949. In poor health for several years, he died April 23, 1956.

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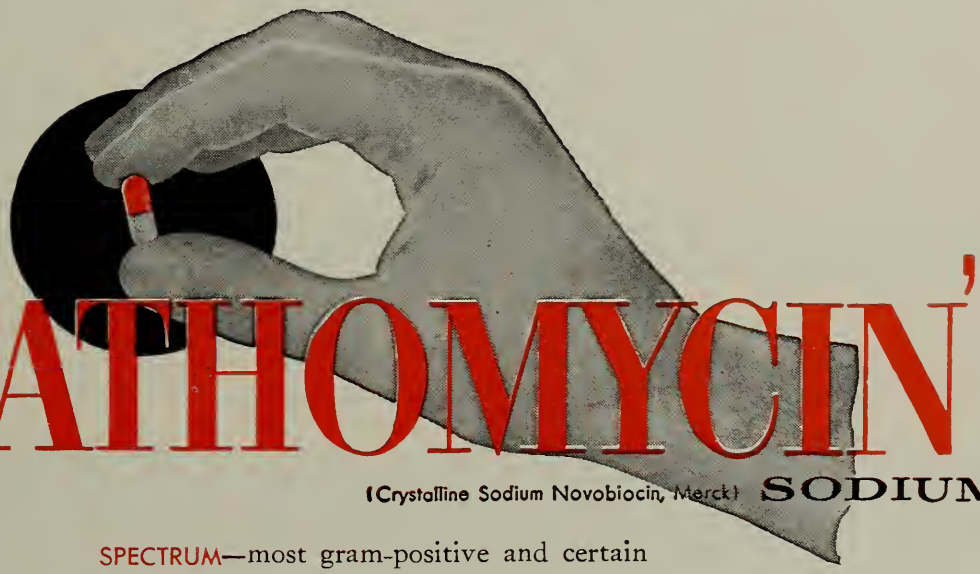
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MICHIGAN AUTHORS

P. J. Melnick, M.D., and **Harry M. Walsh, M.D.,** Eloise, are the authors of an article entitled "Carcinoma *In Situ* of the Uterine Cervix," published in *Surgery, Gynecology and Obstetrics,* June, 1956.

Bruce E. Cohan, B.S., Ann Arbor, is the author of of an article entitled "Aqueous Humor Outflow; An Experiment Study Using Radiopaque Materials," published in AMA *Archives of Ophthalmology,* June, 1956.

Gordon C. Brown, Sc.D., and **Donald C. Smith, M.D.,** Ann Arbor, are the authors of an article entitled "Serologic Response of Infants and Preschool Children to Poliomyelitis Vaccine," published in *The Journal AMA,* June 2, 1956.

Harold F. Schuknecht, M.D., Detroit, and **Roderick C. Davison, M.D.,** Winnipeg, Man., Canada, are the authors of an article entitled "Deafness and Vertigo from Head Injury," published in AMA *Archives of Otalaryngology,* May, 1956.

Gerald S. Wilson, M.D., Joel E. Powers, M.D., and **Charles G. Johnston, M.D.,** Detroit, are the authors of an article entitled "Cancer of the Esophagus," published in AMA *Archives of Surgery,* May, 1956.

Prescott Jordan, Jr., M.D., Thomas B. Patton, M.D., and **Clifford D. Benson, M.D.,** Detroit, are the authors of an article entitled "Portal Hypertension in Infants and Children," published in AMA *Archives of Surgery,* May, 1956.

Fred Jenner Hodges, M.D., Ann Arbor, is the author of an article entitled "The Position of Radiology in Cardiovascular Diagnosis," published in *Minnesota Medicine,* May, 1956.

Kingsley M. Stevens, West Point, Pennsylvania, and **Philip A. Riley, M.D.,** Jackson, are the authors of an article entitled *"In Vivo* Studies on Precipitin Production by the Rabbit Spleen," published in the *Journal of Immunology,* March, 1956.

Philip A. Riley, Jr., Jackson, **Timothy G. Barila,** Captain, MC, USA, and **Carl W. Hughes,** Lt. Colonel, MC, USA, are the authors of an article entitled "Ventricular Fibrillation in Hypothermic Dogs as Influenced by Thiopental, Pentobarbital and Succinylcholine," published in *Anesthesiology,* March, 1956.

James E. Coyle, M.D., Detroit, is the author of an article entitled "Radiation Therapy Viewed by the Otolaryngologist," published in *Annals of Otology, Rhinology and Laryngology,* December, 1955.

James E. Coyle, M.D., and **Samuel L. Balofsky, M.D.,** Detroit, are the authors of an article entitled "Current Trends in Radiotherapy of Head and Neck Cancer," published in *Transactions, American Academy of Ophthalmology and Otolaryngology,* March-April, 1955.

Harry M. Nelson, M.D., Detroit and **P. J. Howard, M.D.,** Louisville, Kentucky are authors of an original article, "Breast Cancer During Pregnancy and Lactation," which was published in *Clinical Medicine* of April, 1956.

T. H. Joos, M.D., N. S. Talner, M.D., and **J. L. Wilson, M.D.,** of Ann Arbor, are authors of an original article, "Risk of Surgery in Poliomyelitis Patients Dependent on Respirators," which appeared in JAMA, July 7, page 935.

A. C. Nolke, M.D., Detroit, is author of an original article, "Suppositories in Children," which appeared in JAMA, June 23, page 693.

A. R. Bauer, M.D., Detroit, is author of an article, "Mechanical Respirator for Newborn Infants and Other Patients," which appeared in Clinical Notes, JAMA, June 23, page 723.

* * *

The Twenty-first Annual Congress of the International College of Surgeons, United States and Canadian sections, will be held at the Palmer House, Chicago, September 9-13, 1956. An elaborate program has been announced. There will be symposia on Trauma, Rehabilitation, Orthopedic, Neurologic and Occupational Surgery, Gall-bladder Surgery, Vascular Surgery, Gynecologic Surgery, Peptic Ulcer, Use of Segments of Bowel as Substitutes for Other Organs, and Carcinoma of the Breast. There are six sections with varying programs. Twenty renowned foreign specialists are expected.

* * *

New Polio Vaccine Regulations.—On June 26, 1956, the Commissioner of Health announced new regulations for the use of Salk polio vaccine to take immediate effect, as follows:

Rules and Administrative Policies Governing the Distribution and Use of Poliomyelitis Vaccine

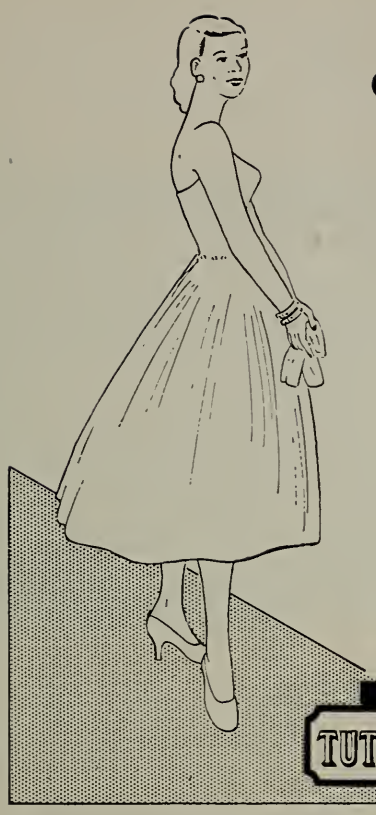
Under Authority of Act 146, P.A. 1919, as Amended, Given Immediate Effect, Adopted and Filed with the Secretary of State on March 6, 1956

Rule No. 8 is hereby amended to read as follows:

8. Vaccine will be used only to give first and second *and third* doses to persons within the designated priority age groups. The second dose to be given not sooner than one month after the first, and the *third dose to be given not sooner than six months after the second dose.* The person's age at the time of the first injection shall be the deciding factor.

It was decided that 25 per cent of the future supplies of Salk Poliomyelitis vaccine would be distributed through commercial channels, but this does not change the requirement as to age priority—Commercial vaccine is limited by Michigan Law to children age 1 through 14 and pregnant women. It is also necessary to report

(Continued on Page 1010)



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(Continued from Page 1008)

the use of commercial vaccine in the same manner as vaccine received from the Health Department and given to your patients.

The children who are now eligible for a third dose of Salk vaccine would include the children who were vaccinated with two doses in the Spring of 1955, and those children and pregnant women who received their second shot in October, November, and December, 1955. As each week passes additional children will become eligible for their third dose.

* * *

A recent study by the Michigan State Board of Registration in Medicine shows there are 155 students from Michigan in out-of-state medical schools. An effort is being made to induce most of them to return to their home state for practice. In constrast, the report shows that 200 Michigan students attend osteopathic schools, with about sixty returning to our state every year.

* * *



More than 40 per cent of the tuberculosis patients discharged from Michigan's sanatoriums in 1955, left against medical advice. They numbered 1,713. Of these, 1,520 left with their disease uncontrolled.

A patient who leaves before his treatment is completed risks spreading his disease to his family and community. When the doctor can convince a tuberculous patient of his responsibility to himself and to society before the patient enters a sanatorium, something has been accomplished toward keeping him there until he is cured.

* * *

The Ninth Annual University of Michigan Conference on Aging was held at the Michigan Union in Ann Arbor, July 9 to 11, 1956. Workshops were held to offer professional workers and community groups the opportunity to discuss methods for planning, developing, and integrating specific kinds of medical and social services. Also planned were demonstrations, seminars and clinics.

* * *

Distinguished Service Award.—While attending a meeting of the American Academy of General Practice, of which he is President, John S. DeTar, M.D., of Milan, was among a group given Distinguished Service Awards by Dennison University, "in recognition of outstanding achievement and distinguished service which has contributed to an alert America." The recipients were Harold H. Burton, Associate Justice of the United States Supreme Court; Florence E. Allen, first woman to sit on a Federal Court of General Jurisdiction, also a member of the Supreme Court of Ohio; and John S. DeTar, M.D., President, American Academy of General Practice.

Dr. DeTar flew from Chicago, June 10, 1956, to appear Monday morning on the Arlene Frances TV

(Continued on Page 1012)

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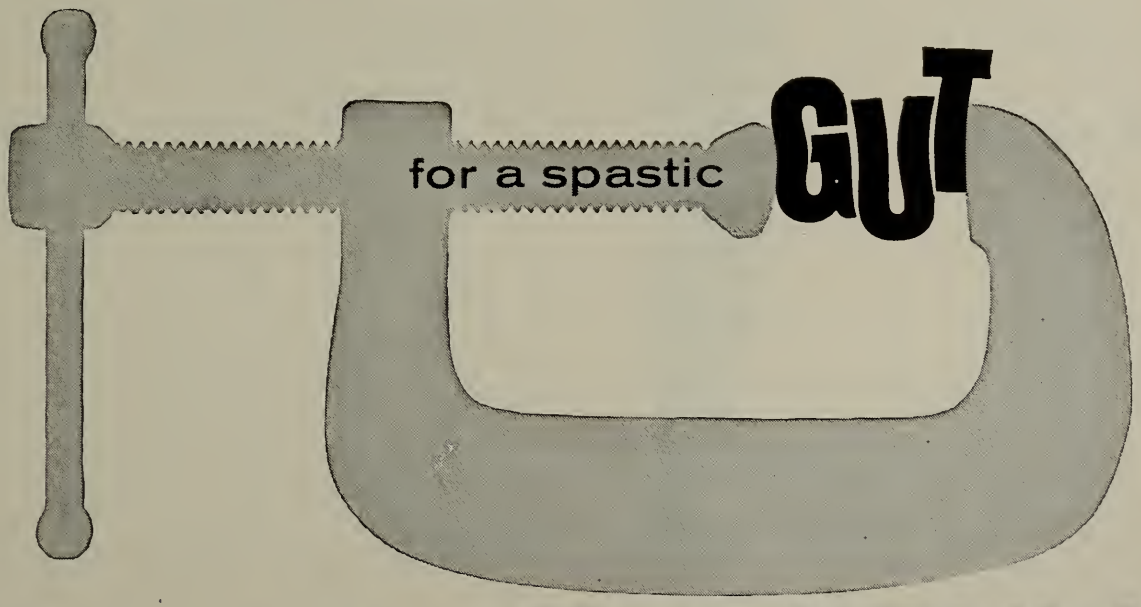
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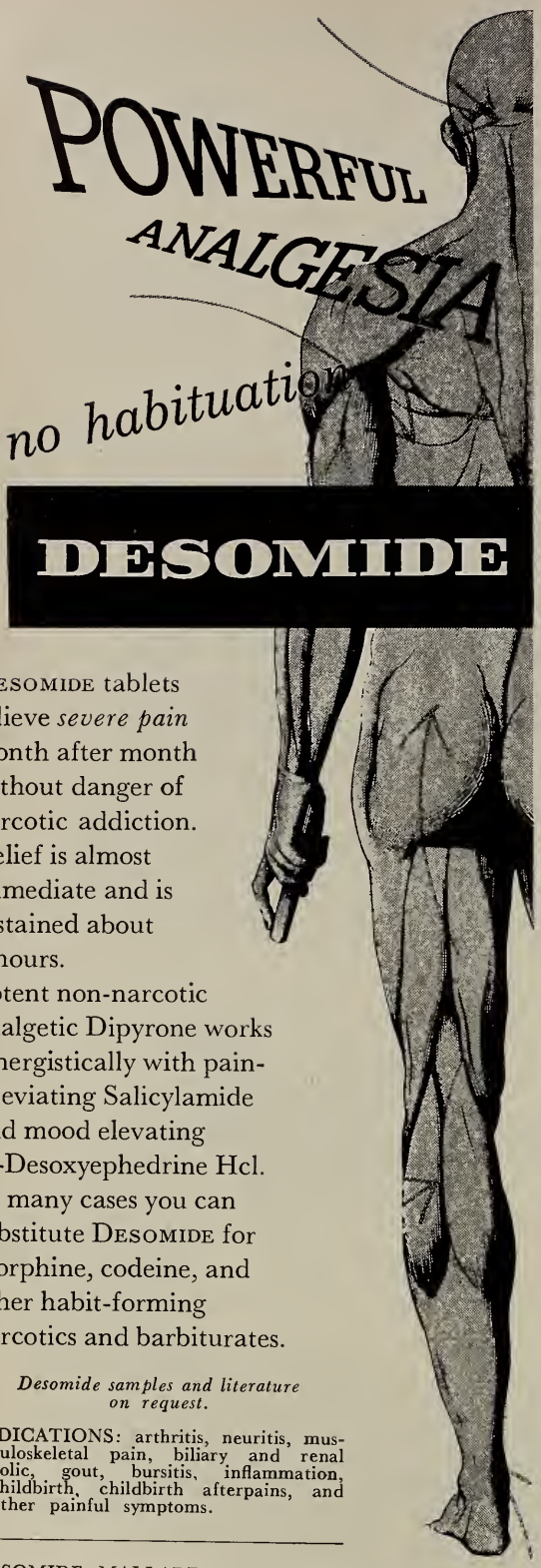
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(Continued from Page 1010)

program. He was back in Chicago in time to sit in the House of Delegates of the AMA.

* * *

Nebraska Attorney General Beck has ruled that a county board has the right to purchase Blue Cross-Blue Shield group coverage for the needy persons of a county. He said it is evident that furnishing needy persons with such benefits is a governmental duty imposed on counties, and express authority is given counties to raise money by taxation for this purpose. Because there appeared to be no limitation of method for carrying out this duty, Beck said, the county board should be allowed to use its own discretion in performing it, provided a reasonable method is used. At one time, some years ago, the Michigan Social Welfare Department toyed with an arrangement to use MMS for this purpose. It fell through because of disapproval from Washington.

* * *

The Commission on Professional and Hospital Activities, Inc., a new national service to improve hospital efficiency, has opened headquarters in Ann Arbor. Its Director is Dr. Vergil N. Slee, former Barry County health center director. Dr. Slee says service now extends to thirty-one hospitals in Michigan, Massachusetts, New York, Illinois, Ohio, West Virginia, Florida and South Dakota. Others will be added later. The Commission grew out of study conducted by Southwest Michigan Hospitals Council.

The Commission, at a charge of 25 cents per patient, provides a medical statistical service designed to help hospitals simplify medical records and analyze them more effectively. It also shows ways to improve medical and administrative practices.

Included among officers of governing body are president, Dr. Paul R. Hawley, director of American College of Surgeons, and treasurer, Dr. Edwin L. Crosby, AHA director. A Kellogg grant will support the program for three years, after which it will continue on a self-sustaining basis.—*Ann Arbor News,* June 23, 1956.

* * *

The American College of Physicians held its Thirty-seventh Annual Session at Los Angeles, California, April 16-20, 1956, with a gross registration of over 4,500. Dr. Walter L. Palmer, of Chicago, was inducted as President. Other officers elected were: Dr. Richard A. Kern, Philadelphia, President-Elect; Dr. Chester M. Jones, Boston, First Vice President; Dr. George H. Anderson, Spokane, Second Vice President; Dr. Truman G. Schnabel Sr., Philadelphia, Third Vice President; Dr. Wallace M. Yater, Washington, D. C., Secretary-General. Dr. William D. Stroud, Philadelphia, was re-elected Treasurer.

The following men from Michigan were elected to membership:

Fellows—Muir Clapper, Detroit; Ivan Francis Duff, Ann Arbor; John Martin Miller, Ann Arbor.

Associate Members.—Robert William Corley, Jackson; Robert Dore Gittler, Ann Arbor; Floyd Banbury Levagood, Detroit; Leland Dale Shaeffer, Jackson; John

(Continued on Page 1014)

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(Continued from Page 1012)

Chandler Smith, Saginaw; Richmond Watson Smith, Jr., Detroit; Donald Henry White, Lincoln Park; Howard Raymond C. Eddy, Adrian; James Amos McLean, Ann Arbor.

The 1957 Annual Session will be held in Boston, Massachusetts, April 8-12; the 1958 Annual Session, in Atlantic City, N. J., April 28-May 2.

* * *

Following the annual meeting and completion of the Part II Examinations of the American Board of Obstetrics and Gynecology, the following statistics were compiled:

Out of the total number of 471 new and reopened applications this year, 108 were postponed by the Credentials Committee. A total of 430 candidates took the Part I Examinations, and of forty-eight failures in this group, twenty-five were failures in the Written Examinations and twenty-three in Case Reports. There was a total of 415 candidates who participated in the Part II Examinations; 317 were certified and 99 failed.

Applications for certification for the 1957 Examinations are now being accepted. All candidates are urged to make such application at the earliest date possible. Deadline date for receipt of applications, new and reopened, is October 1.

Current Bulletins outlining present requirements may be obtained by writing to the Secretary's office: Robert L. Faulkner, M.D., American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.

The following Michigan physicians were certified by this Board May 20, 1956: Norman L. Banghart, Ann Arbor; Samuel J. Behrman, Ann Arbor; Charles J. Berger, Birmingham; Edmund L. Botch, Ann Arbor; Fred B. Gray, Grand Rapids; Arthur R. Rummel, Detroit; Perry E. Prather, Saginaw; James M. Riekse, Grand Rapids; John T. Rogers, Detroit; James H. Tisdel, Port Huron; Robert F. Trescott, Lansing; Clarence F. Webb, Grand Rapids; Joseph B. Woolfendon, Detroit.

* * *

The Sixth International Congress on Laryngology will be held in Washington, D. C., May 5 through 10, 1957. The Scientific Program is complete and includes speakers from Sweden, Switzerland, Germany, England, Argentina, Canada, Italy, Yugoslavia, Japan, Brazil, Cuba, Netherlands, Austria, many of these countries sending several speakers. For details, write the General Secretary, 700 N. Michigan Ave., Chicago.

* * *

Leonard A. Scheele, M.D., has resigned as Surgeon General of USPHS, effective August 1, to become president of Warner-Chilcott Laboratories. Last April he started his third term as Surgeon General. Requesting leave to resign, he wrote President Eisenhower he wished to provide more properly for his family. His twenty-three-year Public Health Service record was highly praised by the Chief Executive and Dr. Scheele's superior, Secretary Folsom.

(Continued on Page 1016)

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1. Pollock, B. E., and Pruitt, F. W.: Am. J. M. Sc., 226:172, 1953.

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(Continued from Page 1014)

Several thousand 1956 medical graduates, who are liable for two years' military service, have started on hospital internships. Soon they will receive from Assistant Secretary of Defense (Health and Medical) a fact sheet on deferment for residency training. The intern who decides to participate will: (1) fill out and return by September 15, the form accompanying fact sheet; (2) submit his application for military commission by November 1, and (3), if he is selected for residency deferment, notify the Pentagon by Feburary 1, 1957, that he has been accepted for training by an accredited hospital.

Some 900 young physicians have joined this "Berry Program"—500 first-year residents and approximately 400 others in advanced stages of specialty training. It is planned to select from the 1956-57 intern crop, 1,000 applicants for deferment beginning next year.

* * *

For May, 1956, consumer price index for medical care (including physicians' and dental services, hospitalization and drugs) was 131.9. This compares with 131.6 in previous month, 105.4 in June, 1950, and 72.6 in 1939. Composite index for all consumer commodities and services was 115.4, with medical care standing at top of major categories, i.e., food, housing, transportation, etc. Of ten selected cities for which index figures were supplied by Bureau of Labor Statistics, Cleveland was highest in "medical care" bracket with 145.5; lowest, Scraton, Pennsylvania, 121.3. New York's index was 126.7; Detroit's, 142.4; Washington's, 123.4.

* * *

The Ford Foundation has announced grants totaling $6,826,850 to twenty-one research centers for strengthening and extending research in mental health.

The foundation said the grants were allocated from a 15-million-dollar appropriation announced in May, 1955. The money will be used in the next five years.

The Foundation also announced a grant of $3,682,000 to the Foundations' Fund for Research in Psychiatry, New Haven, Connecticut, for development of research personnel and $210,000 to the Mental Health Research Fund in London, for research and training in Britain.

Research projects include personality dynamics and development, biological, physiological and somatic problems, social and community aspects of mental health, children's disorders and studies in therapy.

Recipients include the University of Michigan psychology department, which will get $313,000.—*Detroit Free Press,* June 25, 1956.

* * *

The University of Michigan Triennial Medical Alumni Reunion will be held in Ann Arbor, September 27-28-29. For program and information, write A. C. Furstenberg, M.D., Dean, Medical School, University Hospital, 1313 E. Ann Street, Ann Arbor.

* * *

Norman F. Miller, M.D., of Ann Arbor was named President of the American Gynecological Society at its annual meeting in Washington, D. C., May 23.

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The Midwest Group of the Medical Library Association will hold its fall meeting at Henry Ford Hospital, Detroit, Michigan on October 19 and 20, 1956. The tentative program includes the following speakers: Dr. Jacques P. Gray (Parke Davis Co.) on "Medical Writing," Dr. James Barron (Henry Ford Hospital) on "Intravenous Feeding of Whole Food," and Dr. Lutfi M. Sa'di (Harper Hospital) on "Arabic Medicine." On Friday evening, there will be a dinner at Clinton Inn, Greenfield Village, after which the group will visit the Ford Museum. A library workshop is planned for Saturday morning.

* * *

Urology Award—The American Urological Association offers an annual award of $1000 (first prize of $500, second prize $300 and third prize $200) for essays on the result of some clinical or laboratory research in Urology. Competition shall be limited to urologists who have been graduated not more than ten years, and to hospital interns and residents doing research work in Urology.

The first prize essay will appear on the program of the forthcoming meeting of the American Urological Association, to be held at the Hotel William Penn, Pittsburgh, Pennsylvania, May 6-9, 1957.

For full particulars, write the Executive Secretary, William P. Didusch, 1120 North Charles Street, Baltimore, Maryland. Essays must be in his hands before December 1, 1956.

T. P. Wickliffe, M.D., Calumet, was elected President of the Upper Peninsula Medical Society at its 1956 Annual Meeting in Sault Ste. Marie, June 22-23 which attracted a registration of 216.

Houghton was selected as the site for the 1957 convention, to be held in June, 1957.

* * *

G. B. Saltonstall, M.D., Charlevoix, has been appointed official observer for the Michigan State Medical Society at the Tenth General Assembly of the World Medical Association, scheduled for Havana, Cuba, October 9-15, 1956.

* * *

The 10th Biennial International Congress of the International College of Surgeons will be held in Mexico City, February 25-28, 1957. The official travel representative of the College, International Travel Service, 119 S. State Street, Chicago 3, has arranged an elaborate travel program to and in Mexico to add to the pleasure of those attending the Mexican Congress.

* * *

The First International Cancer Cytology Congress will be held at the Drake Hotel, Chicago, October 9-11, 1956. This Congress is sponsored by the International Union Against Cancer, the College of American Pathologists, the American Society Clinical Pathologists, and the Inter-Cytology Council. The program will feature a series of broad discussions on the practical values of cytology diagnostic technique. For information and program, write Arthur H. Dearing, M.D., Prudential Plaza, Suite 2115, Chicago 1.

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Medical Examiner Can't Call Coroner's Inquest.—The Michigan Supreme Court, on June 28, ruled that when a county substitutes the medical examiner system for its coroner, it automatically does away with the coroner's inquest. The Supreme Court said the Legislature in enacting the 1953 medical examiner law intended to allow counties which so choose to "substitute pathological investigation in lieu of coroner-jury inquisition." The opinion held that the county medical examiner had neither the power nor duty to impanel a coroner's jury or to hold an inquest after voters have authorized a switch from the old system of investigating suspicious deaths.

* * *

The Sears-Roebuck Foundation, in cooperation with the AMA made a grant of $125,000 for the establishment of a Revolving Assistance Fund, to make loans to physicians desiring to establish or improve medical facilities in areas where the medical care is inadequate. The sole criteria, besides medical proficiency, has been the need of the community for medical service. In the short time the Fund has been in existence, 22 loans have been made affecting thirty-three physicians in thirteen states. Loans ranged from $3,000 to $25,000 and now total $179,500.

The Foundation is now accepting applications for the last half of 1956. Those applications received before October 1 will be acted upon by December 15. The loans are on a ten-year non-secured basis, ranging from 0 to 6 per cent interest, depending upon the rapidity of repayment.

For information, write Norman H. Davis, Director, Medical Program, Sears-Roebuck Foundation, 3333 Arthington Street, Chicago.

* * *

Postgraduate courses on diseases of the chest, sponsored by the American College of Chest Physicians, include a course at Hotel Knickerbocker, Chicago, October 15-19. For information and program, write the College at 112 E. Chestnut Street, Chicago 11.

* * *

Dr. Reuben L. Kahn, discoverer of the famous Kahn reaction or Kahn test for the detection of syphilis, retired at the end of June after twenty-seven years of service to the University of Michigan as Professor of Serology in the Medical School and Director of Serologic Laboratories in the University Hospital.

Dr. Kahn, upon retiring, stated he is "retiring from routine only." He plans to concentrate his work on research.

Congratulations, Dr. Kahn, and may your important contributions be continued for many years to come!

* * *

The American College of Surgeons will hold its 42nd Annual Clinical Congress in San Francisco, October 8-12, 1956. For the first time, student representatives from sixteen medical schools will attend the Clinical Congress at College expense. This is a new plan whereby a num-

ber of senior medical students will attend ACS Congresses every year—with schools participating in rotation, depending upon the geographic location of the meeting.

For program and full information, write the College at 40 E. Erie Street, Chicago 11.

* * *

The AMA's June, 1956, meeting in Chicago drew a registration of 27,115 persons, including 9,969 physicians.

* * *

Luther C. Carpenter, M.D., of Grand Rapids, and **Vergil N. Slee, M.D.,** of Hastings, are members of the recently appointed Commission on Professional and Hospital Activities, Inc., which was created through the joint efforts of the American College of Surgeons, the American Hospital Association, the American College of Physicians, and the Southwestern Michigan Hospital Council. First act of the Commission will be to conduct a medical statistical service that will help hospitals simplify medical records and analyze records more effectively for improvement of medical and administrative practices. A Kellogg Foundation grant of $260,000 will support the program for its first three years.

The Commission is an outgrowth of the Professional Activities Study carried on for the past three years by the Southwestern Michigan Hospital Council under the direction of Dr. Slee. The Michigan experiments demonstrated possibilities that the same methods could be of significant help to hospitals in all parts of the country.

* * *

"Selected Problems of Current Significance" is the topic for the 29th Annual Graduate Fortnight October 15-26, 1956, sponsored by The New York Academy of Medicine. For program and full information, write the Academy at 2 E. 103 Street, New York 29.

* * *

Of the two million diabetic persons in the United States, about one million don't know they have the ailment, according to the American Diabetes Association.

* * *

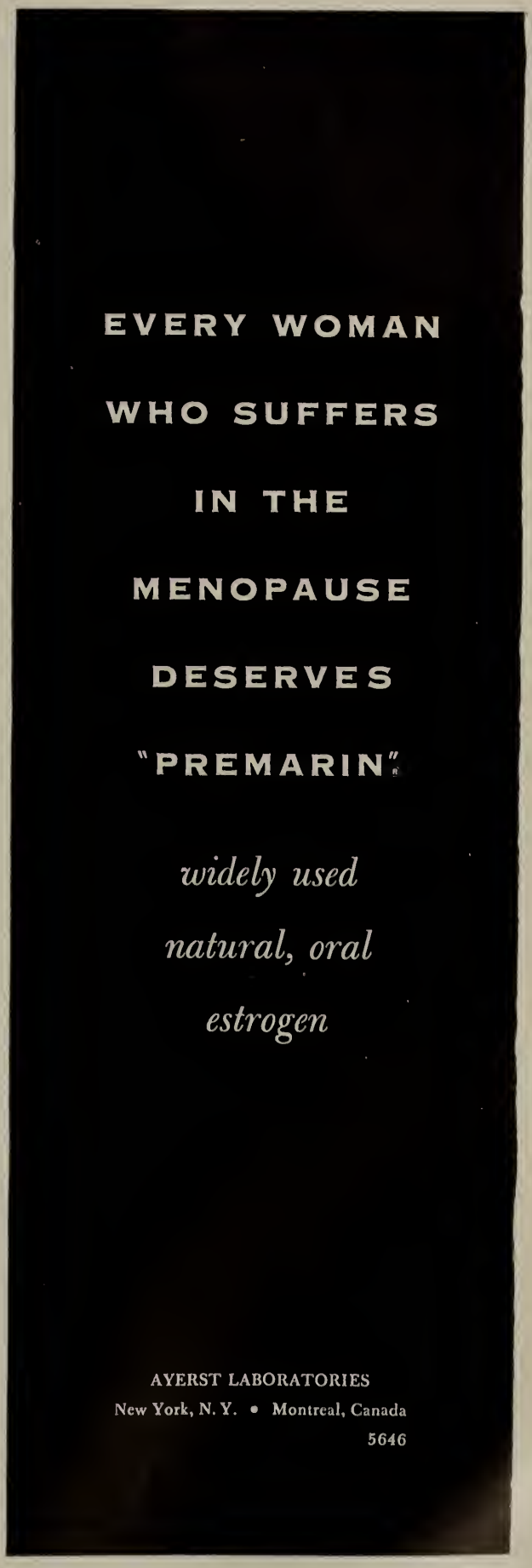
Parke, Davis & Company has won *The Saturday Review's* award "for distinguished advertising in the public interest" during 1955. More than 400 advertising campaigns in magazines were screened—with Parke, Davis being one of the top five receiving the most votes from the awards committee. Singled out for special attention was the Detroit pharmaceutical firm's national avertisement headlined: "Is there one question you're too shy to ask your doctor?"

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* * *

F. Maxwell Shuster, longtime district manager (including Michigan) for E. I. DuPont de Nemours Company, and the perennial "traffic director" at MSMS Annual Sessions and Michigan Clinical Institutes, just has been promoted by his corporation. Mr. Shuster is now in charge of the Florida Division, with permanent headquarters at Fort Lauderdale.

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James R. Acocks, M.D., Marquette; U. M. Adams, M.D., Marcellus; Donald G. Alberts, M.D., Grand Rapids; W. H. Alexander, M.D., Iron Mountain; T. O. Anderson, M.D., Detroit; R. V. August, M.D., Muskegon; Carl E. Badgley, M.D., Ann Arbor; L. J. Bailey, M.D., Birmingham; A. S. Barefield, M.D., Detroit; C. G. Barone, M.D., Detroit; James Barron, M.D., Detroit; F. W. Baske, M.D., Flint; V. V. Bass, M.D., Saginaw; L. G. Bateman, M.D., Flint; G. H. Bauer, M.D., Ann Arbor; G. P. Beamer, M.D., Dearborn; J. H. Beaton, M.D., Grand Rapids; A. J. Beecher, M.D., Detroit; E. H. Beernink, M.D., Grand Haven; W. C. Behen, M.D., Lansing; W. B. Bennett, M.D., Grand Rapids; T. I. Bergman, M.D., Highland Park; J. E. Berk, M.D., Detroit; Harry Berman, M.D., Flint; Leonard Birndorf, M.D., Detroit; F. H. Bethell, M.D., Ann Arbor; G. C. Bishop, M.D., Almont; I. M. Blatt, M.D., Ann Arbor; M. A. Block, M.D., Detroit; W. D. Block, M.D., Ann Arbor; J. J. Boccia, M.D., Detroit; H. C. Bodmer, M.D., Kalamazoo; C. F. Boothby, M.D., Hartford; J. K. Bosch, M.D., Northville; H. E. Bowman, M.D., Grand Rapids; W. S. Briggs, M.D., Detroit; O. A. Brines, M.D., Detroit; W. R. Bristol, M.D., Detroit; H. S. Broderson, M.D., River Rouge; P. H. Broudo, M.D., Detroit; William Bromme, M.D., Detroit; E. M. Brown, M.D., Huntington Woods; F. W. Brown, M.D., Lansing; Jacob Bruggema, M.D., Evart; R. C. Buerki, M.D., Grosse Pointe Farms; W. D. Buzzard, M.D., Chesaning; and Mary Lou Byrd, M.D., Grand Rapids.

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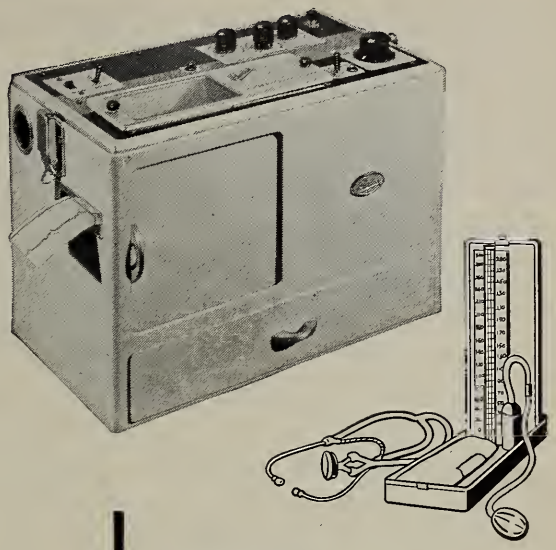
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Surgical Anatomy and Clinical Surgery, two weeks, October 1.
Surgery of Colon and Rectum, one week, September 17.
General Surgery, one week, October 22.
Thoracic Surgery, one week, October 1.
Esophageal Surgery, one week, September 24.
Breast and Thyroid Surgery, one week, October 22.
Gallbladder Surgery, three days, October 29.
Fractures and Traumatic Surgery, two weeks, October 15.
GYNECOLOGY AND OBSTETRICS—Obstetrics and Gynecology, three weeks, October 22.
Office and Operative Gynecology, two weeks, September 17.
Vaginal Approach to Pelvic Surgery, one week, September 10.
MEDICINE—Electrocardiography and Heart Disease, two-week basic course, October 8; one-week advanced course, September 17.
Internal Medicine, two weeks, September 24.
Gastroscopy and Gastroenterology, two weeks, September 10.
Gastroenterology, two weeks, October 22.
Dermatology, two weeks, October 15.
Cardiology (Pediatrics), two weeks, November 5.
RADIOLOGY—Diagnostic X-ray, two weeks, September 17.
Clinical Uses of Radioisotopes, two weeks, October 8.
UROLOGY—Two-week course, October 8.
Cystoscopy, ten days, by appointment.

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* * *

Applying color television to the teaching of medical science is the new task of Michigan medical men. Harry A. Towsley, M.D., Ann Arbor, Chairman of the University of Michigan Medical School TV Committee, stated recently, "The most important use we can make of this wonderful medium is as an adjunct to present teaching methods. Nothing will replace the vital teacher-student-subject relationship." The establishment of a color compatible television system in the University Hospital will be a U-M first. A grant of $187,000 from the Dow Chemical Company inaugurated the program at the University of Michigan.

* * *

The Ford Foundation recently announced a $10,000,000 program of matching grants to the National Fund for Medical Education, to be made over a five-ten year period with a maximum limit in any one year of two million dollars.

Last year the National Fund—which distributes monies raised by the AMEF along with contributions from industry and the general public—received $2,147,000 in unearmarked funds for distribution to the nation's medical schools. Of this amount, $422,812 came from the medical profession through AMEF. Under the Ford Foundation formula, if these receipts are the same in 1956, a Ford grant totaling 70 per cent of this amount or $1,503,486 would be made.

The National Fund for Medical Education is the organization which distributes to the medical schools the funds raised by the AMEF, along with the contributions made by industry and the general public.

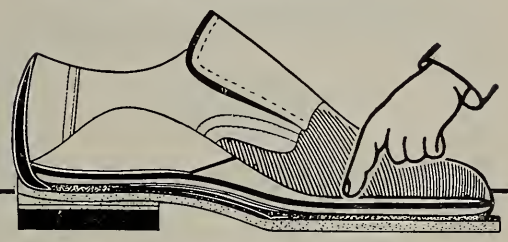
Mr. Gaither said the Ford Foundation grants will be made on a matching basis over a five- to ten-year period with a maximum grant in any one year limited to $2,000,000.

In 1955, the National Fund received $2,147,000 in unearmarked funds for distribution to the nation's medical schools. Of this amount, an unearmarked $422,812 came from the medical profession through the American Medical Education Foundation. Under the Ford Foundation formula, if 1956 receipts are equally large, there would be a Ford grant totalling 70 per cent of this amount, or $1,503,486. All contributions in excess of the 1955 total would be matched dollar for dollar, subject to the annual maximum of $2,000,000.

After 1956, each year's grant would match the preceding year's receipts on a diminishing scale, but all receipts over the preceding year's total would be matched dollar for dollar, up to the $2,000,000 annual ceiling.

The announcement of these matching grants is very heartening to physicians who have contributed to the medical schools through AMEF. It will mean that for every unearmarked dollar contributed to AMEF, another 70 cents to a dollar will be given by the Ford Foundation, thereby stimulating additional financial support which the nation's medical schools have so critically needed.

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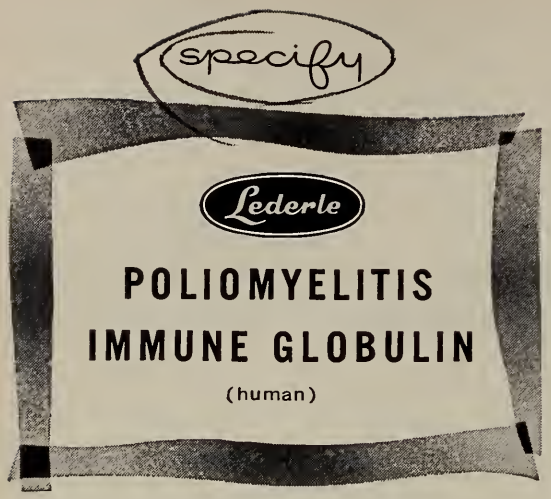
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Placed by Michigan Health Council:	*Open Practice In*	*Approximate Date*	*From*
C. L. Bahnik, M.D.	Owasippe Summer Camp	June	Louisiana
Neil Love, M.D.	(Locum Tenens)	June	Saginaw
Winslow G. Fox, M.D.	Frankenmuth	June	Charleston, Ill.
Edmund Talanda, M.D.	Ann Arbor	July 1	Lansing
Richard Heilman, M.D.	Stanwood	July 1	Lansing
Assisted by Michigan Health Council:			
Robert O. Ralston, M.D.	Pontiac	June 1	Ann Arbor
Donald McCorvie, M.D.	Williamston	June	Lansing
Jesse Ketchum, M.D.	Royal Oak	June	New York City
William L. Hauptmann, M.D.	Royal Oak	June	California

MEDICAL TELEVISION SHOWS
Produced by Michigan Health Council

Date	*Station*	*Subject*	*Guests*
June 3, 1956	WJBK-TV, Detroit	Alcoholism—The Revolving Door	A Film
June 10, 1956	WJBK-TV, Detroit	Summer Care of the Skin	Alice E. Palmer, M.D., Detroit Coleman Mopper, M.D., Detroit
June 14, 1956	*WKAR-TV, East Lansing*	Summer Health Habits	Douglas Fryer, M.D., Lansing
June 17, 1956	WJBK-TV, Detroit	Modern Heart Care	A Film
June 24, 1956	WJBK-TV, Detroit	Preface to a Life	A Film

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

PEPTIC ULCER. Diagnosis and Treatment. By Clifford J. Barborka, M.N., M.S., D.Sc., F.A.C.P., Associate Professor of Medicine and Chief, Gastrointestinal Clinics, Northwestern University Medical School; Attending Physician, Passavant Memorial Hospital; Senior Consultant in Gastroenterology, Veterans Administration Research Hospital, Chicago, Illinois; formerly Consulting Physician, Mayo Clinic; and E. Clinton Texter, Jr., M.D., Associate in Medicine and Assistant Chief, Gastrointestinal Clinics, Northwestern University Medical School; Attending Physician, Passavant Memorial Hospital; Attending in Gastroenterology, Veterans Administration Research Hospital, Chicago, Illinois. 33 illustrations. Boston-Toronto: Little, Brown and Company, 1956. Price $7.00.

PULMONARY CARCINOMA. Pathogenesis, Diagnosis, and Treatment. Edited by Edgar Mayer, M.D., and Herbert C. Maier, M.D. New York University Press, Washington Square, New York. Philadelphia and New York. J. B. Lippincott Company, 1956. Price $15.00.

Eighteen physicians and surgeons have collaborated in the presentation of this excellent textbook covering all aspects of pulmonary carcinoma, stressing the early diagnosis of a cancer which has increased incredibly in the past twenty years with a death rate which has jumped 250 per cent in two decades. There are a great number of x-rays illustrating malignant and benign pulmonary lesions, well illustrated pathological specimens and slides, and an appendix with brief case histories which suggest pitfalls in diagnosis.

Surgical treatment, radiotherapy, radioisotope therapy and chemotherapy both curative and palliative are carefully presented, along with the medical management of the surgically incurable patient. Although there are detailed chapters on the functional aspects of pulmonary disease, the biology of cancer, its etiology, pathology, et cetera, which would mainly interest the specialist in this field, there is sufficient sound discussion of the diagnosis of lung cancer and its postoperative management to make this book of considerable value to the practitioner of medicine.

S.B.W.

HYPNOTIC SUGGESTION. Its Role in Psychoneurotic and Psychosomatic Disorders. A Thesis by S. J. Van Pelt, M.B., B.S., President of the British Society of Medical Hypnotists; Editor of the *British Journal of Medical Hypnotism.* New York: Philosophical Library, 1956. Price, $2.75.

Hypnosis has again and again drawn the attention of physicians in the study and treatment of emotional disorders. Though the techniques have changed through the years and though the results of treatment by hypnosis have been variable, the enthusiasm of the hypnotist seems to have remained at a high level. The author of this monograph is no exception. The older methods are dismissed with a brief discussion, then the "author's original method" is introduced. The explanation of the theory and application of this approach is diagrammatic and amazingly simple. The illustrative case histories reveal unusually prompt and completely successful cures with a minimum of time and effort. Though interesting it seems unlikely that this monograph will provide much help for either the specialist or the general practitioner in the treatment of the neuroses.

F. O. M.

ESSENTIALS OF DERMATOLOGY By Norman Tobias, M.D., formerly Associate Professor of Dermatology, St. Louis University; Dermatologist, St. Louis State Hospital; Fellow, American Academy of Dermatology and Syphilology; Diplomate, American Board of Dermatology and Syphilology. Fifth edition. 211 figures. 11 subjects in color. Philadelphia and Montreal: J. B. Lippincott Company, 1956. Price, $8.00.

The fifth edition of this book has been increased considerably in size, as compared with the previous edition. This is to allow for inclusion of a discussion of the newer drugs and techniques used in dermatology. It still includes only the essentials by describing adequately the common dermatoses and deleting the rare ones. Among other good features to aid the general physician is a chapter on the drugs causing eruptions, nursing instructions for hospital cases, instructions to patients and tables of localization of eruptions.

This is a handy book for quick reference, it is easy to read and is well illustrated. While this book does not contain the detail a dermatologist would want, it is an excellent volume to fit the needs of general practitioners and medical students.

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As early as the 1880's, the organization recognized the value of trained disaster workers, the wisdom of using local committees to establish the disaster needs of their neighbors, and the importance of diaster rehabilitation. Through the years, the Red Cross has developed special techniques to cope with diaster problems, policies to administer relief, and procedures in preparedness that involve other agencies, institutions, and local, state, and national government agencies. Although these techniques and procedures are modified to meet changing conditions, the primary purpose of Red Cross Disaster Services remains the same: to alleviate human suffering.

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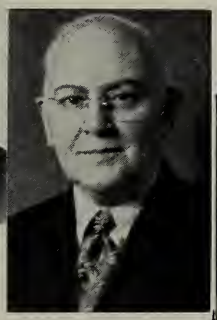
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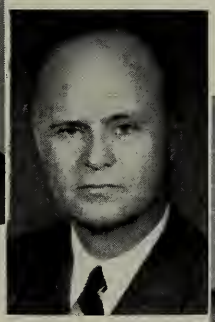
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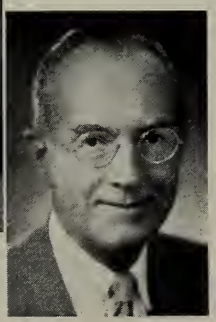
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Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 14, Minnesota.

Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, $6.00; single copies, 60 cents. Additional postage; Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year.

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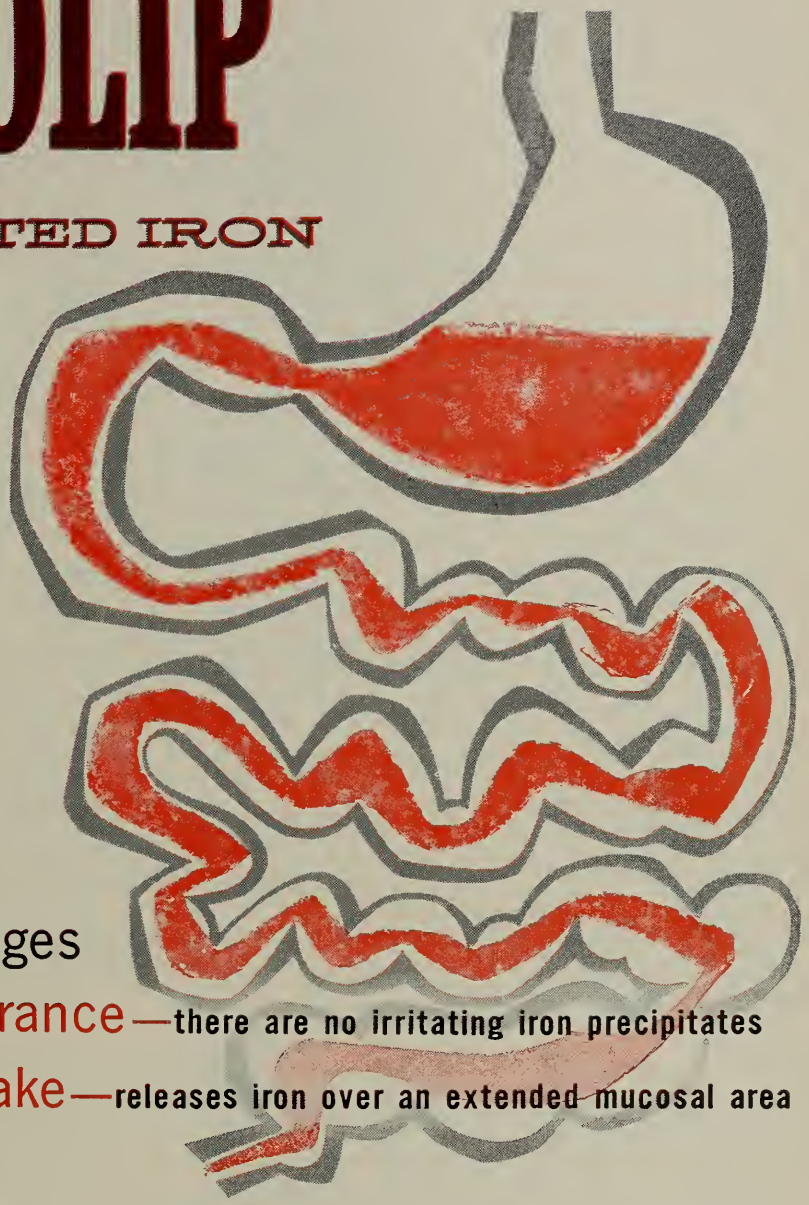
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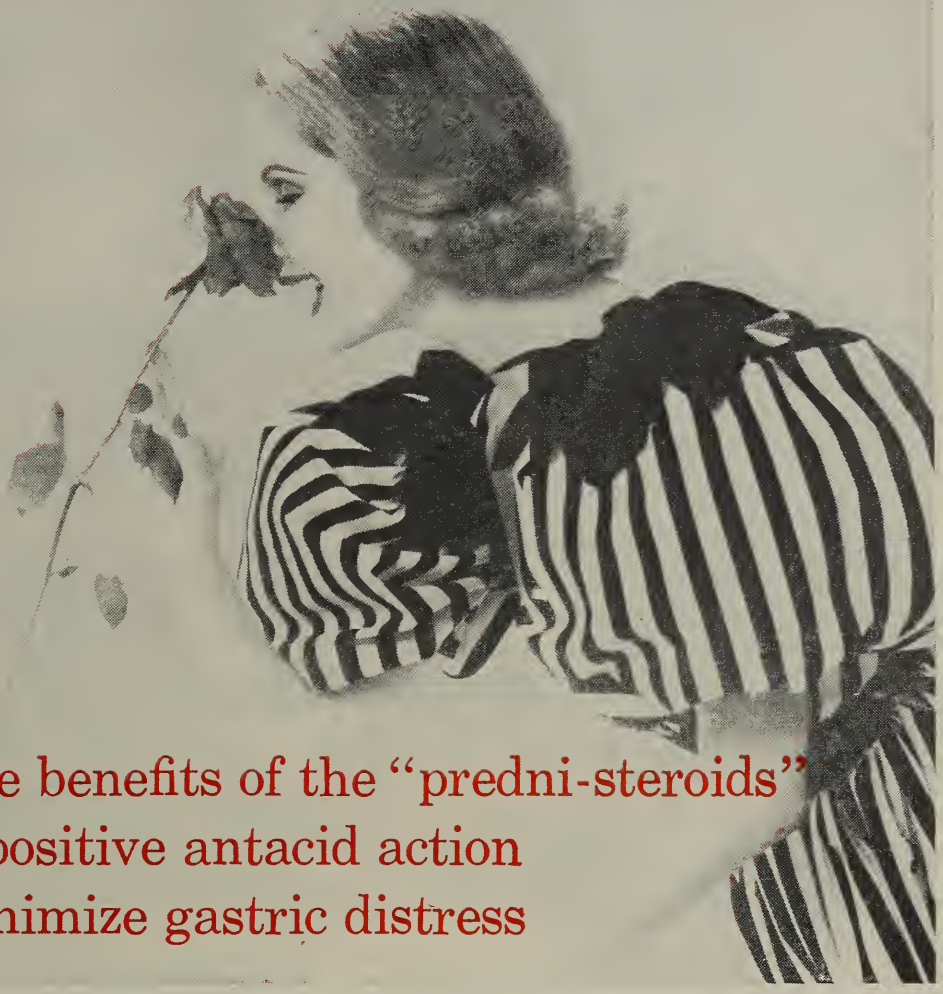
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Clinical evidence[1,2,3] indicates that to augment the therapeutic advantages of prednisone and prednisolone, antacids should be *routinely* co-administered to minimize gastric distress.

References: 1. Boland, E. W., *J.A.M.A.* 160:613 (February 25) 1956. 2. Margolis, H. M. *et al.*, *J.A.M.A.* 158:454 (June 11) 1955. 3. Bollet, A. J. *et al.*, *J.A.M.A.* 158:459 (June 11) 1955.

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The U. S. Internal Revenue Service has just issued a regulation, effective August 9, that expenditures for education are deductible if they are for a "refresher" or similar type of course taken to maintain the skills directly and immediately required by the physician in his employment or business. An educational course to be covered should be designed for established medical practitioners to help them keep abreast of current developments in the profession; it should be of short duration; it should not be taken on a continuing basis, and should not carry academic credit. (Education designed to prepare the practitioner to enter a specialty will not be acceptable.)

When a doctor of medicine travels away from home primarily to obtain "refresher" education, his expenditures for travel, meals, and lodging while away from home are deductible. However, expenses for personal activities such as sightseeing, social visiting or entertaining, or other recreation will NOT be allowed.

The MSMS Annual Session (Detroit, September 26-28) presents a "refresher" program.

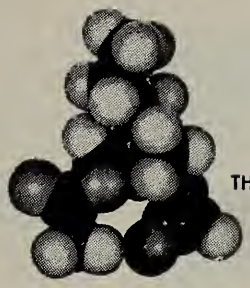
HIGHLIGHTS OF THE COUNCIL

Session of July 19-21, 1956

One Hundred and eleven (111) items were presented to The Council at its Midsummer Session. Those of chief importance were:

- **A vote of approbation** was extended to E. C. Swanson, M.D., of Vassar, Secretary of the Michigan State Board of Registration in Medicine, for his successful efforts in reorganizing this state board.
- **House of Friendship** at MSMS Annual Session, Detroit, September 26-28. Allocations were assigned to the hospitality booth, to be manned by members of The Council.
- **President Jones** presented the background leading to his July 13 news release objecting to proposed free distribution of Salk polio vaccine to all persons up to nineteen years of age. Dr. Jones explained that as of July 3 the National Foundation for Infantile Paralysis advised that sufficient polio vaccine was available for general distribution; the Foundation urged that private practitioners assume leadership and responsibility for its distribution. Dr. Jones also reported that on July 19 the Michigan legislature in special session adopted a substitute bill allocating only one-half of the amount of state money, as previously requested, for free distribution, which is adequate for necessary requirements.
- **Councilor Conferences** were authorized to be called by each Councilor for the purpose of acquainting delegates, alternate delegates, presidents and secretaries of component county societies with necessary information that may be presented to the 1956 House of Delegates.
- **President W. S. Jones, M.D., and President-Elect Arch Walls, M.D.,** were authorized to attend an AMA conference in Chicago called to discuss provisions for medical care of servicemen's dependents.
- **Legal Counsel J. Joseph Herbert** presented a progress report on the Kopprasch case in Allegan County.
- **A letter of commendation** was authorized to be forwarded to Messrs. Martin Fleming and Donald M. D. Thurber, both of Detroit, for their work in defeating recent legislation inimical to the best welfare of the crippled and afflicted children of this state.
- **Committee Reports.**—The following committee reports were presented: (a) Maternal Health Committee, meetings of February 22 and June 19; (b) Permanent Conference Committee, June 20; (c) Committee on Michigan Medical Service, June 28; (d) Committee on Mediation, Ethics and Grievance, June 8; (e) Geriatrics Committee, July 10; (f) Committee on Welfare Package Deals, July 11; (g) Beaumont Memorial Committee, July 18; (h) Committee on Health and Accident Insurance Policy Control, July 19; (i) Committee on Medical-Legal Problems (a committee of the State Bar of Michigan), July 19; (j) Committee on Healing Arts Study, July 19; (k) Liaison Committee with Michigan Medical Service, July 21. Report of the three standing committees of The Council (County Societies, Finance, and Publication) were presented and approved.
- **Beaumont Memorial Foundation:** Recognizing that sustained effort is vital, The Council approved the suggestion of the Beaumont Memorial Committee and placed in its annual report a recommendation that the House of Delegates create a Beaumont Memorial Foundation to which all MSMS members are eligible to join at an annual membership fee to be established, and further that all MSMS members be invited and urged to become participants.
- **Allocation of the MSMS Journal numbers** for the year 1957 were made.

(Contiued on Page 1040)



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- well tolerated, non-addictive, essentially non-toxic
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Built in accordance with the recommendations of the American Standards Association, the UT-4 carries the approval or acceptance of F.C.C., Canadian Dept. Transport and Underwriters' Laboratories.

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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1038)

- **Nominations for Michigan's Foremost Family Physician.** The Council is to recommend to the 1956 House of Delegates that two Michigan Foremost Family Physician Awards be issued this year, one to J. H. Sherk, M.D. (formerly of Midland) posthumously, and one to a living doctor, said doctor to be chosen by the House in the usual fashion.

- **The Council recommended** that the legislature be asked to make the office of the Executive Secretary of the Michigan State Board of Registration in Medicine a full-time position and that said secretary be paid an appropriate salary commensurate with such work.

- **The Council also recommended** the introduction of a resolution into the 1956 House of Delegates urging an increase in the teaching personnel of Wayne University College of Medicine to permit the admission of fifty more first-year students each year.

- **The Annual Report of The Council** was developed and approved, for submission to the 1956 House of Delegates.

- **The annual joint meetings of the MSMS Council** with (a) Michigan Hospital Association Board, (b) Michigan Crippled Children Commission, (c) Michigan Health Council, and (d) Secretary of Michigan State Board of Registration in Medicine were held. Matters of mutual interest were discussed.

- **Reorganization of Midsummer Session of The Council.** The avalanche of work thrown upon The Council at its Midsummer meetings (four in number), and ways to spare the time of members of The Council at this three-day session, resulted in The Council Chairman's being authorized to appoint a study committee to reorganize the Midsummer Session.

- **A vote of appreciation** was sent to Michigan Hospital Service-Michigan Medical Service and to Mr. L. Gordon Goodrich, congratulating them on the printed program of the Midsummer Session of The Council—a memento of the fiftieth anniversary in practice of Wilfrid Haughey, M.D., JMSMS Editor and also President of Michigan Medical Service.

Only patients with cancer confined to the prostatic capsule are considered good prospects for curative treatment by surgery.

* * *

From routine autopsy studies, it has been shown that evidence of histological carcinoma of the prostate exists in 15 to 20 per cent of men over fifty years of age, even when the disease is not clinically demonstrable.

Meat...

and Its Place in the Diet in Congestive Cardiac Failure

Meat has an appropriate place in the moderate-protein, low-sodium, acid-ash diet advocated in the dietary management of patients with congestive cardiac failure.[1] When extreme sodium restriction is necessary, the meat allowance is regulated accordingly.

Lean meat allows maintenance of a positive nitrogen balance without excessive protein intake, because its amino acids match the quantity and proportions needed for tissue synthesis and repair.[2,3] In the fresh state as purchased it supplies only small amounts of sodium ranging from approximately 50 to 100 mg. per 100 grams. Due to its acid-ash composition (equivalent to 4 to 38 ml. of normal acid per 100 grams of meat) it may facilitate diuresis.[1]

In addition to these important features, meat contributes valuable nutritional factors by virtue of its generous supply of high quality protein, B vitamins, and essential minerals—iron, phosphorus, potassium, and magnesium.

Easy digestibility, a prime requisite of foods eaten by the patient with congestive cardiac failure, is another outstanding quality of meat.

1. Odel, H. M.: Nutrition in Cardiovascular Disease, in Wohl, M. G., and Goodhart, R. S.: Modern Nutrition in Health and Disease, Dietotherapy, Philadelphia, Lea & Febiger, 1955, p. 709.
2. Berg, C. P.: Utilization of Protein, J. Agr. & Food Chem. *3*:575 (July) 1955.
3. Best, C. H., and Taylor, N. B.: The Physiological Basis of Medical Practice, ed. 6, Baltimore, Williams & Wilkins, 1955, p. 638.

The nutritional statements made in this advertisement have been reviewed by the Council on Foods and Nutrition of the American Medical Association and found consistent with current authoritative medical opinion.

American Meat Institute
Main Office, Chicago...Members Throughout the United States

Heart Beats

"ECG TEST BOOK" ISSUED BY HEART ASSOCIATION

Issuance of a two-volume "Electrocardiographic Test Book" has been announced by the Michigan Heart Association. The ECG volumes are designed for teaching electrocardiography in the medical schools and for postgraduate study by physicians. The work is edited by Travis Winsor, M.D., Los Angeles.

Included in the first volume of the test book are 119 electrocardiograms, each of which is accompanied by several pertinent questions. There is also a section containing 230 general questions on electrocardiography and an appendix which includes a table of normal values. The second volume contains interpretations and discussions of the electrocardiograms and answers to the questions.

The "ECG Test Book" is the result of a two-year project commissioned by the American Heart Association's Committee on Professional Education. Dr. Winsor was assisted in the preparation of the volumes by thirty-four leading authorities in the field of electrocardiography, including Franklin D. Johnston, M.D., of the University of Michigan, Gordon B. Myers, M.D., of Wayne State University, and Robert F. Ziegler, M.D., of Henry Ford Hospital. These physicians reviewed the work and many of their suggestions were incorporated into the final text.

Copies of the "ECG Test Book" are available from the Michigan Heart Association, Doctors' Building, 3919 John R, Detroit 1. Cost is $5.00 per set.

HEART OF THE HOME CLASSES SCHEDULED

Classes in time and energy saving techniques for cardiac homemakers will be expanded this year throughout Michigan. It is anticipated that all counties that have not had the program will be serviced this year, thereby completing at least one program in all of the eighty-three counties in Michigan. *The classes are designed as an adjunct to private medical practice and are not competitive with it.* No medical advice, diagnosis, treatment or examination is provided through the program. The classes are financed by the Michigan Heart Association and are held in cooperation with Michigan State University and Wayne State University. The schedule of classes is as follows:

Michigan State University

September 18, 25, Oct. 2, 9—Genesee County
September 19, 26, Oct. 3, 10—Genesee County
September 20, 27, Oct. 4, 11—Macomb County
October 16, 18, 23, 25—Alger County
October 17, 19, 24, 26—Luce County
November 6, 8, 13, 15—Ingham County
November 7, 9, 14., 16—Kent County
November 12, 14, 19, 21—Schoolcraft County
November 13, 16, 20, 23—Menominee County
November 19, 26, Dec. 3, 10—Hillsdale County

Wayne State University

September 20, 27, Oct. 4, 11—Ferndale
October 5, 12, 19, 26—Dearborn
October 2, 9, 16, 23—Redford

Doctors of Medicine are invited to refer cardiac patients to the classes. Complete details can be secured by writing to the Michigan Heart Association, Doctors' Building, 3919 John R, Detroit 1, Michigan.

NEW MEDICAL LECTURE KIT AVAILABLE "PREVENTION OF RHEUMATIC FEVER"

A second medical lecture kit designed to enable the doctor of medicine to continue his postgraduate education in the comfort and convenience of his home or office has been made available by the Michigan Heart Association. The new kit is entitled PREVENTION OF RHEUMATIC FEVER, and was prepared by Gene H. Stollerman, M.D., Assistant Professor of Medicine, Northwestern University Medical School. It consists of three twelve-inch long-playing (33⅓ rpm) records with thirty-one correlated slides (35 mm.), a table top viewer for slides and a script of the actual discussion. The running time is approximately forty-four minutes. The kit can be adapted easily for meetings by using adequate amplification for the record player and a projector and

(Continued on Page 1048)

Introducing

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CONTROL OF *Pain*

Each tablet contains:

Aspirin	200 mg.	(3 grains)
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Caffeine	30 mg.	(½ grain)
Demerol hydrochloride	30 mg.	(½ grain)

Average Adult Dose: 1 or 2 tablets
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Bottles of 100 tablets. *Narcotic blank required.*

"Such a combination has proven clinically to be far more effective and no more toxic than equivalent doses of any of these used singly."*

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*Bonica, J.J.; and Backup, P.H.: Northwest Med., 54:22, Jan. 1955.

Demerol, trademark reg. U. S. Pat. Off., brand of meperidine.

"PREVENTION OF RHEUMATIC FEVER"

(Continued from Page 1046)

screen for the slides. The Rheumatic Fever Control Committee of the Michigan State Medical Society has approved the kit for use in Michigan. The complete kit is available on a free loan basis by writing to the Michigan Heart Association, Doctors' Building, 3919 John R, Detroit 1, Michigan.

TWO INTERNATIONAL CONGRESSES OF CARDIOLOGY ON FALL CALENDAR

Physicians and research scientists will be welcome at two international cardiologic congresses to be held abroad this Fall. These meetings are the Second European Congress of Cardiology in Stockholm, September 10-14, and the Fifth Inter-American Congress of Cardiology in Havana, November 11-17.

Additional information on the Inter-American Congress of Cardiology may be obtained by addressing the Congress at Apartado 2108, Havana, Cuba. Registration fees may be paid by money order payable to Dr. Luis Ortega Verdes, Congress treasurer. These fees are $25.00 for full registration, and $10.00 for associate registration, which is available to members of the registrant's family. Application forms may be obtained from the American Heart Associotion.

Information on the European Congress may be obtained from Dr. Karl Erik Grewin, Secretary General, Second European Congress of Cardiology, Södersjukhuset, Stockholm, Sweden.

organomercurial diuretics
"...permit ingestion of enough salt to make food palatable; without them, many patients would lose their appetites, a consequence of the salt-free diet which has occasionally been known to cause serious malnutrition."*

*Modell, W.: The Relief of Symptoms, Philadelphia, W. B. Saunders Company, 1955, pp. 265-266.

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AHA SCIENTIFIC SESSIONS PROGRAM OUTLINED

A tentaive program has been outlined for the American Heart Association's Twenty-ninth Scientific Sessions to be conducted in Cincinnati in conjunction with the Association's thirty-second annual meeting, October 26-31.

General sessions, which will be held on three mornings, will endeavor to include those papers of the widest interest to all professional disciplines attending the scientific sessions. Specialized sessions, which will be afternoon events, will encompass those papers of particular interest to the members of the various sections and councils of the Association.

APPLICATION DEADLINES SET FOR 1957 AHA RESEARCH SUPPORT

Applications for support of research to be undertaken during the fiscal year beginning July 1, 1957, are now being accepted by the American Heart Association. Further information and application forms may be obtained from the Medical Director, American Heart Association, 44 East 23rd Street, New York 10, New York.

THINK IT OVER

A harried, high-strung businessman, constantly worried by an over-burden of work he felt responsible to do, had come to his psychiatrist for advice.

"I can't sleep at night, Doctor," he complained, nervously fidgeting with his hat and the arms of his chair. "And I've been nervous and quick-tempered at the office lately. What can I do?"

"I think you'd better follow a new schedule," the psychiatrist advised. "First, plan to complete only six hours of work in an eight-hour day. And second, spend one day each week at a cemetery."

"At a cemetery?" echoed the amazed patient. "What am I supposed to do there?"

"Nothing much," the psychiatrist replied calmly. "Just look around. Get acquainted with some of the men who are in there permanently. And remember that they didn't finish their work either. Nobody does, you know."

—From "The Right Hand"—August, 1956

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Specific—because you can actually pinpoint the therapy for coccic infections. That's because most bacterial respiratory infections are caused by staph-, strep-and pneumococci. And these are the very organisms most sensitive to ERYTHROCIN—even when in many cases they resist other antibiotics.

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AMA Washington Letter

THE MONTH IN WASHINGTON

In terms of actual health bills passed and sums of money appropriated, the 84th Congress which ended just a few weeks in advance of party presidential conventions undoubtedly set some records. Measures ranged from the far-reaching program of disability cash payments to a bill for the commissioning of male nurses in the armed services.

In between are a wide variety of measures which, in the opinion of Secretary Folsom, Secretary of Health, Education, and Welfare, give "promise of immediate and substantial progress on a wide front in the improvement of the nation's health."

Both Mr. Folsom and the President deplored the fact that Congress had not acted on their plan for federal aid to medical schools, but Congress decided this was one of the subjects that needed more study before taking any further action. In addition Mr. Folsom expressed disappointment that nothing had been done on authority for pooling arrangements among small health insurance companies and the long-dormant plan for a health reinsurance fund.

On medical research funds, the administration this session asked for the largest amount of money ever requested in one year. The appropriation finally voted was even larger, some $170 million. On top of this, Congress in its final hours appropriated nearly $80 million to carry out new legislation just passed.

Here are the highlights of major health bills approved by the 84th Congress:

Social Security Amendments.—Changes in the twenty-one-year-old social security law now include (1) Old Age and Survivors Insurance payments to disabled workers at age fifty, paid from a "separate" fund; (2) extension of social security to some 250,000 dentists, lawyers, osteopaths and other self-employed persons; (3) lowering of retirement age for social security purposes for women from sixty-five to sixty-two; (4) earmarked payments for medical care of public assistance recipients; and (5) increase of payroll deductions by one-half of 1 per cent and three-eights of 1 per cent for the self-employed.

Laboratory Research Facilities.—The Hill-Bridges bill for $90 million in construction grants over three years to public and nonprofit institutions to erect research facilities started out in the Senate as a bill to aid research in crippling and killing diseases, but wound up for research in all "sciences related to health."

Health Amendments Act.—The so-called little omnibus health bill provides for federal grants for training of public health specialists, professional nurses qualified for teaching and administrative jobs and for practical nurses—plus a two-year extension beyond next July 1 of the ten-year-old Hill-Burton hospital program, and special projects grants for mental health studies and demonstrations.

Medical Care for Military Dependents.—A long-sought goal of the Defense Department was enactment of a permanent program of medical care for dependents of armed services personnel either in military hospitals and clinics or through private sources. It is scheduled to begin early in December.

National Library of Medicine.—Another proposal long in the making was the re-establishment of the Armed Forces Medical Library as the National Library of Medicine. For administrative purposes, Congress put it under the Department of HEW, but left up to the seventeen-man board of regents the selection of site—in all likelihood in the Washington area.

Sickness Survey.—Special and continuing surveys on the extent of illness and disability in the U. S., along with medical care being offered have been authorized—the first detailed study of its kind in over twenty years. The work will be done by the Public Health Service.

Water Pollution Control.—The PHS is authorized to make grants to states and communities to help in construction of sewage disposal plants, at the rate of $50 million a year for ten years.

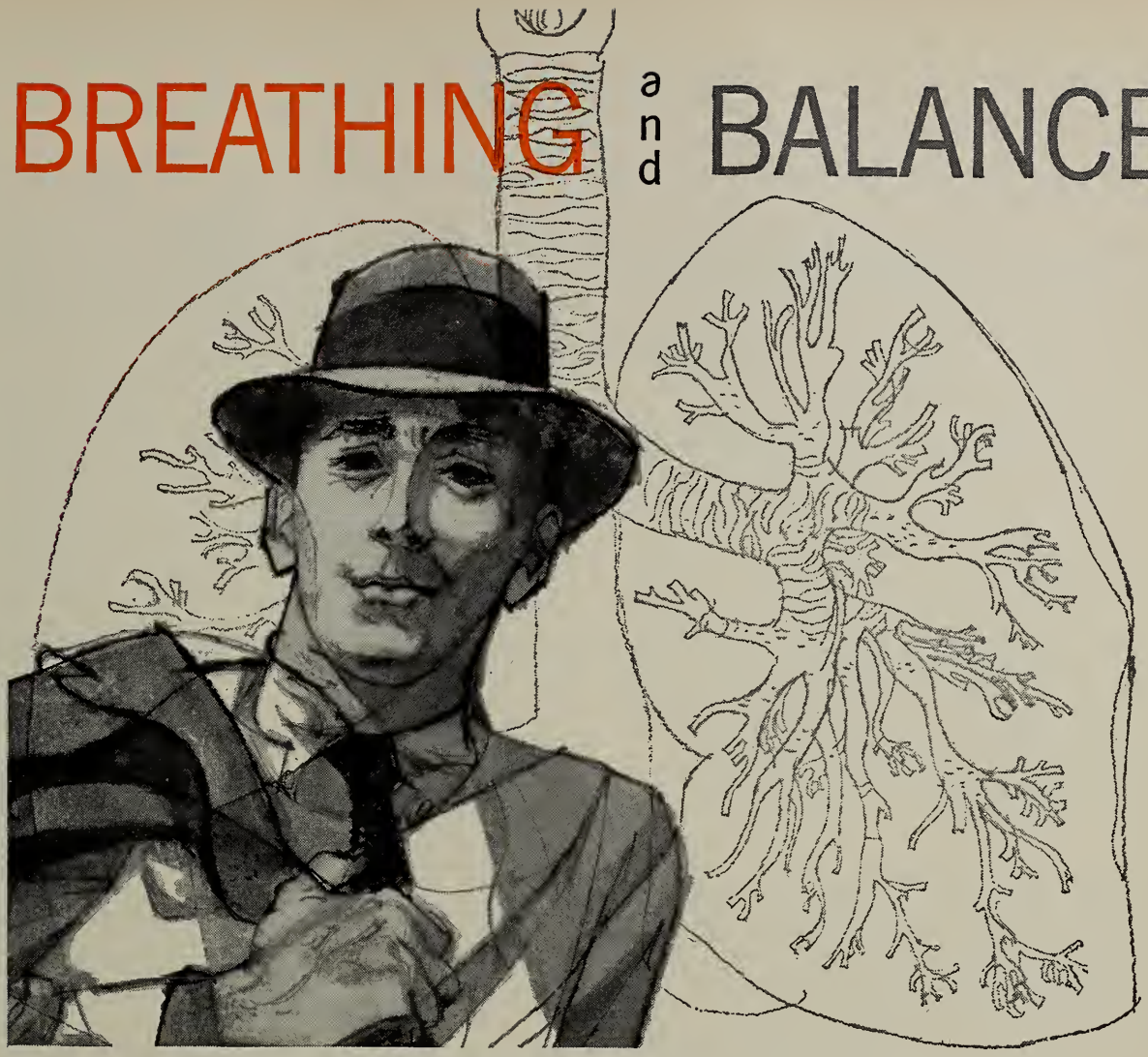
Some other measures signed into law by the President were: establishment of a mental health program for Alaska, budget increases for additional staff for the Food and Drug Administration along with a new headquarters building for modern laboratories, provision of medical care for employes and dependents of the State Department abroad in U. S. military facilities, a $400,000 fund to finance the holding of the World Health Assembly in this country in 1958 (which is the tenth anniversary of the founding of the World Health Organization) and the commissioning in the armed services of osteopaths.

* * *

NOTES: The new surgeon general of the PHS is Dr. Leroy E. Burney, a career officer in the

(Continued on Page 1054)

BREATHING and BALANCE



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brand of prednisolone

one of "the best therapeutic agents now available"*

Supplied: White, 5 mg. oral tablets, bottles of 20 and 100. Pink, 1 mg. oral tablets, bottles of 100. Both are deep-scored.

*Schwartz, E.: New York J. Med. 56:570, 1956.

provides restoration of breathing capacity — Relief of symptoms [bronchospasm, cough, wheezing, dyspnea] is maintained for long periods with relatively small doses.*

minimal effect on electrolyte balance — "in therapeutically effective doses . . . there is usually no sodium or fluid retention or potassium loss."* Lack of edema and undesirable weight gain permits more effective therapy particularly for those with cardiac complications.

PFIZER LABORATORIES, Brooklyn 6, New York
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Say you saw it in the Journal of the Michigan State Medical Society

PR REPORT

A LIBRARY OF PR IDEAS and PR materials is being organized at MSMS headquarters in Lansing as an important adjunct to the public relations program of the medical profession in Michigan. Under supervision of a professional librarian, the mass of PR tools and source materials gathered by the MSMS PR department over the past ten years or more is being catalogued and stored for reference and use. In addition to such obvious materials as films, movie scripts, radio shows, and PR "how-to-do-it" texts, the library will contain a voluminous supply of background information and literature borrowed from many fields of business and industry but adaptable to use by the medical profession.

When the library is completed, MSMS will have on tap for ready use perhaps the widest compilation of PR source material possessed by any medical organization, state or national. . . . And it will be for your use, Doctor, and the use of your County Medical Society, as well as MSMS.

THE AMA COUNCIL ON RURAL HEALTH is eligible for many compliments upon the two new pamphlets which it has prepared and distributed to leaders of farm groups, state and national. The booklets, prepared for rural groups, are entitled "A Member of the Family—Your Doctor" and "Check and Know." The first is an appeal for every family to get and keep a personal or family physician. The second is a companion piece which deals with the value of a periodic physical examination when it becomes a part of the permanent record in the personal physician's office. Distribution has been made a responsibility of state medical societies, and copies of these two booklets are available through MSMS. They are particularly recommended for Home Demonstration groups of rural women and for such discussion groups as sponsored by the Michigan Farm Bureau.

AFTER THREE YEARS as Associate Public Relations Counsel, A. DeWitt ("Dee") Brewer resigned from the MSMS executive staff on August 15 to become First Vice President of the Mount Clemens Federal Savings & Loan Association. Mr. Brewer was reared in Mount Clemens and was a reporter and assistant editor on the daily newspaper there before he entered the Army in 1942. He came to MSMS headquarters in Lansing from Grand Rapids, where he had served as Public Relations Director of the Chamber of Commerce, United Fund, and Office of Price Stabilization. Before assuming full-time duties with the Mount Clemens institution, Mr. Brewer is acting as field representative for the Legislative Campaign Committee of the state Republican organization until the November general election.

MSMS WAS HIGHLY COMPLIMENTED for its part in producing a series of successful television programs over WKAR-TV, the Michigan State University station at East Lansing, during the 1955-56 broadcast season. Miss Kay Eyde, producer of the program, formally thanked MSMS in a letter expressing great appreciation for "repeated, generous co-operation." She added: "I feel that an audience which needs to receive the latest information on matters concerning general health and scientific medical advancements profited by the contributions of those who participated." She particularly thanked Arthur E. Schultz, M.D.; James Neering, M.D.; Lawrence E. Drolett, M.D., and F. W. Tamblyn, all of Lansing, for their contribution, as well as E. C. Swanson, M.D., of Vassar and Lansing, Secretary of the State Board of Registration in Medicine.

Miss Eyde extended "best wishes for the continued high standard of service offered by the Michigan State Medical Society."

AMA WASHINGTON LETTER

(Continued from Page 1052)

commissioned corps and for ten years commissioner of health for the state of Indiana. Until his nomination by the President, he was deputy chief of the PHS Bureau of State Services. Dr. Burney received his medical degree from Indiana University.

. . . The Federal government withdrew from the allocation of the Salk poliomyelitis vaccine just fifteen months after the first release of the vaccine, but federal grants to states to help finance inocculation programs continues.

. . . In preparation for a national blood bank directory, the Joint Blood Council with headquarters in Washington launched a nation-wide survey September 1 of all blood banks.

The major mode of spread of cancer of the appendix is by direct extension into contiguous tissues, chiefly the cecum.

* * *

Carcinoma of the appendix is generally considered an extremely rare entity.

* * *

Of all the diagnostic methods available, x-ray appears to be the most effective in discovering early caess of gastric cancer.

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Cortef* *tablets*

Supplied:

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10 mg. tablets in bottles of 25, 100, 500
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Editorial Comment

THE PROFESSIONAL SERVICE REPRESENTATIVE

The Professional Service Representative is ordinarily the only contact the majority of practicing physicians have with the Research Pharmaceutical Houses. He has been intensively pharmaceutically indoctrinated so as to impart the story of the product being detailed in the shortest possible time, and with the least irritation to the doctor. The educational background and ethical standard of the Professional Service Representative, especially those of the research houses, is of high caliber. He generally possesses a college degree, usually in pharmacy. He is often an associate member of our County Medical Society, and should be judged as an individual and not as a class. He is far from being a "pill peddler"—a term as obsolete as it is untrue. He is not attempting to impose unwarranted claims for his products upon us, but is only quoting the results obtained by reputable medical investigators conducting clinical trials on new drugs. He performs a real service by acquainting the physician with the pharmacology, the indications and contraindications of new therapeutic agents.

He serves as our "liaison officer" with the pharmacist, making readily available the therapeutic tools we have determined to use in our practice. Misunderstandings concerning "pricing policy" on the prescriptions we write are ironed out by him. Inquiries concerning aspects of the product being detailed beyond his knowledge are forwarded by him to his medical director. The doctor then receives his answer direct from the research department of the pharmaceutical house.

Common courtesy demands that he, as the representative of the creators of the therapeutic agents we daily use, be accorded a respectful audience when he visits our offices. His time, as well as ours, is also valuable, and he will stay only as long as you indicate. You will be amply and agreeably rewarded by the increased knowledge of the newer drugs thereby acquired.—F. P. Rhoades in *Detroit Medical News,* May 14, 1956.

BELGIAN GOVERNMENT SURRENDERS TO WISHES OF THE MEDICAL PROFESSION

The Belgian government has unconditionally surrendered to the demands of the medical profession to withdraw its attempt to regulate medical care and medical service under its Social Security scheme through legislative status. In addition it has agreed to accept the principle of non-intervention through law and to recognize the conventions agreed upon through the joint effort of representatives of the medical profession and the insurance companies.

In September, 1955, the Belgian government instigated legislative measures which would regulate all activities in medical service and medical care. The Belgian doctors, united in their desire to remain a free profession and to protect the rights of the people receiving medical care under the Social Security plan to receive the best possible medical service available, unanimously opposed the government plan. The united effort of these doctors has now resulted in an unconditional surrender of the government to the doctors, and recognition by the government of the medical profession's plan to provide good medical care and service to the people.—*The Journal of the Indiana State Medical Association,* April, 1956.

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physician groups in Michigan, follows:

1956		
September 24-25	Annual Session of the House of Delegates (MSMS)	Detroit
September 26-28	MSMS Annual Session	Detroit
September 23 & 28	The Council (MSMS)	Detroit
October 9-13	American Rhinological Society—Annual Session	Chicago
October 11-12	Michigan Cancer Conference	East Lansing
October 17	MSMS Executive Committee of The Council	Battle Creek
October 17	Maternal Health Day, Genesee County Medical Society	Flint
Autumn	MSMS Postgraduate Extramural Courses	Statewide
November 14	MSMS Executive Committee of The Council	Detroit
November 27-30	AMA Clinical Session	Seattle
November	Fall Clinic, Michigan Academy of General Practice	Detroit
December 12	MSMS Executive Committee of The Council	Lansing
1957		
May 5-10	Sixth International Congress of Otolaryngology	Washington, D. C.

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

VOLUME 55 SEPTEMBER, 1956 NUMBER 9

The Ingham County Medical Society May Clinic

By L. G. Christian, M.D.,
H. E. Cope, M.D., and
Milton Shaw, M.D.
Lansing, Michigan

IN an attempt to bring current medical information directly to the practitioner of medicine, the Ingham County Medical Society held its first Spring Clinic on April 26, 1928. Two hundred and twenty-seven doctors responded. As far as we can determine this was the first clinic to be held in Michigan under the auspices of a county medical society.

Five years elapsed between the date of this first clinic and the second clinic held by the Ingham County Medical Society. Though the seed of the clinic idea was long in coming into bloom, germination of the idea was not so long delayed. The record shows that in 1931 Doctors Milton Shaw and L. G. Christian proposed that the Society hold an annual Spring Clinic. Successive clinics were held in 1933 and in 1935. From 1935 to the current date the Ingham County Medical Society has had a clinic day each year.

Although the actual date of the clinics has varied between late April and early May through passing years, custom has now fixed the date as the first Thursday in May and an increasing number of practitioners in Michigan mark this date as a "must" on their calendar.

The type of program also has varried from year to year. At various times the clinic has taken the form of a round table or a symposium on a particular subject. The most common and by far the most popular type of program has been one made up of four afternoon speakers and one after-dinner speaker in which the subjects presented have covered widely different aspects of the practice of medicine. Although the subject matter presented in each clinic and from year to year has been varied, the general and specific objective has been the same throughout the years. The Ingham County Medical Society has proposed to bring to the average general practitioner of medicine current and practical information usable in his daily practice of the art and science of medicine.

The list of speakers at the first clinic in 1928 included Doctors Walter C. Alvarez, Joseph C. Beck, James T. Case, Fredrick A. Coller, John Phillips, Miles F. Porter, and Heinrick A. Reye. This list of distinguished gentlemen set the tempo for the calibre of speakers for succeeding meetings. Although speakers have been drawn from the entire geographic area of these United States and from Canada and England, the majority have come from the great reservoirs of medical teaching and practice in the Central States. Cleveland; Chicago; Rochester, Minnesota; Detroit; and Ann Arbor vie statistically with each other for the honor of furnishing the greatest number of speakers. It has been interesting to note that the names of Fredrick A. Coller and Grover Pemberthy appear three times in the records of the clinics and Edward H. Rynearson and Louis Buie twice. Nor can one help but stop and rejoice that we have been given the opportunity to bring

(Continued on Page 1094)

The Patient with Vascular Headache

By Perry S. MacNeal, M.D., F.A.C.P.
Philadelphia, Pennsylvania

DURING the past twenty years the anatomic and physiologic studies of Wolff and his colleagues,[1-6] and the pharmacologic evaluation of the ergot derivatives beginning with Stoll[7] and Maier,[8] have greatly increased the understanding of the mechanism by which pain in the head is produced secondary to intracranial vascular changes. Likewise, new weapons have been made available to assist in relieving these patients of their discomfort. However, there has been a great tendency on the part of many clinicians to group all of the vascular headaches together without any real attempt to separate them into different types or to investigate clearly their clinical causes. This has led to confusion not only in the field of academic research, but also in the field of therapeutic approach. Different authors in speaking of vascular headaches seem to be speaking of entirely different types of syndromes, so that when their results are applied by others the same degree of success is not achieved. The purpose of this discussion is to attempt to differentiate among the important types of vascular headache.

Migraine

Although the word "migraine" is derived from the Greek "hemicrania" and should, therefore, theoretically be applicable to any paroxysmal one-sided headache, it would seem to serve a useful purpose to differentiate a constitutional syndrome which will be described below from other types of unilateral vascular headache and to reserve the term "migraine" for this group. In this way, persons who are reporting clinical observations or therapeutic effects in migraine will be speaking of the same disease. The constitutional disease for which we feel this name should be reserved can frequently be spotted, at least in retrospect, in the history of the patient's childhood. The great preponderance of patients suffering from this disease are female and the family history usually reveals other occurrences of the disease in parents or siblings. It may occasionally skip a generation, since not all children of migrainous parents develop migraine. In childhood the patient is likely to have been susceptible to motion sickness and to recurrent "bilious spells" characterized by vomiting. Headache at this stage is not a prominent symptom. The menstrual periods are frequently a little late in beginning and tend to be irregular for several years so that they may not become established in a completely cyclic fashion until age eighteen or nineteen. At this age the patient assumes the physical habitus which is characteristic. They are small in stature (almost always less than 5 feet 4 inches), slight in build, with delicate skin and a pallid appearance. They are good students at school and tend to be of the obsessive, compulsive personality type. They tend to be relatively infertile and lactation is usually inadequate after the pregnancy has been completed.

Laboratory studies reveal that the anemia is more apparent than real. There is frequently a borderline low basal metabolic rate (—15 to —20 per cent) which does not respond to thyroid extract. The glucose tolerance curve is characteristically of the flat type with a tendency toward hypoglycemia between the fourth and fifth hour. Actual hypoglycemia spells do not occur, however. Excretion of 17-ketosteroid substances is likely to be at the lower limits of normal (6 to 9 mg./24 hours). There is frequently a relative lymphocytosis.

This patient is extremely sensitive to stresses of all kinds. Deviation in temperature and humidity may cause distress. Bright light is always painful and they are extremely susceptible to odors.

The headache itself is reasonably characteristic. It usually begins at about age twenty to thirty-five. It most commonly follows a period of emotional stress, hunger, the ingestion of alcohol or any unusual experience. It is not particularly related to the menstrual cycle. It most commonly is present on awakening in the morning, but may occasionally awaken the patient from a sound sleep at night. In a small percentage of cases (10 to

Presented at the Twenty-Eighth Annual May Clinic of the Ingham County Medical Society, Lansing, Michigan, May 3, 1956.
From the Pennsylvania Hospital, Philadelphia, Pennsylvania.

20 per cent) it may be preceded by scintillating scotomata or other neurologic phenomenon, such as monoplegia or hemianopsia. The pain itself begins gradually either in the back of the neck or over one eye and builds up slowly over a period of two or three hours. Photophobia is a prominent part of the headache picture. There is no diplopia, no stuffy nose, no weeping of the eye and no vascular changes in the face. The superficial temporal artery on the affected side may be prominent. After several hours, vomiting may occur and the headache commonly diminishes slowly after the incidence of emesis. Polyuria at this time may occur.

Wolff and others have demonstrated that fluid retention and retention of sodium commonly precede the development of the headache and that local tissue edema and hypersensitivity in the painful area are part of the picture. As the headache disappears, the polyuria apparently represents a release of sodium. The pain itself is due to dilatation of the arteries in the basilar portion of the brain or of the middle meningeal artery. Secondarily, as the headache persists, tension of neck muscles contributes an extracranial portion of pain.

This type of headache can almost uniformly be relieved by the subcutaneous injection of ¼ to ½ mg. of ergotamine tartrate (Gynergen®), provided the injection is administered early in the attack before muscle tension and vascular edema have occurred. However, the inconvenience of injections and the occasional unpleasant side effects of ergotamine tartrate have stimulated the search for other medications. In 1947,[9] we reported the use of Octin by hypodermic injection for the relief of this pain. Our experience with this material has continued and we believe that it has a good synergistic effect when mixed with Dihydroergotamine. The usual method is to mix 1 mg. of Dihydroergotamine and 30 to 50 mg. of Octin in a single syringe and administer it intramuscularly at the beginning of the headache. This will occasionally produce an unpleasant hypertensive response in patients with unstable vasomotor systems, so that the first dose should always be administered while the patient is under close observation. If significant hypertension occurs, the medication should not be used in the future. It should never be given to any patient with organic heart disease or hypertension. However, with these exceptions, this mixture is eminently satisfactory since the Octin tends to mitigate the smooth muscle contraction secondary to the ergot.

Of the oral medications reported to date, Cafergot® (Sandoz) is the most effective. Three or four tablets taken at the onset of the headache, with two more taken an hour and one-half later if necessary, seems to us to be the most effective program. However, this is occasionally followed by unpleasant nausea and vomiting of sufficient degree to contraindicate further use of the medication. Rectal medication has been under study by many investigators and the best now available seems to be the Cafergot-PB Suppository. This suppository contains caffeine, 100 mg.; pentobarbital sodium, 60 mg.; bellafoline, 0.25 mg.; and ergotamine tartrate, 2 mg.

In this type of headache, the so-called "histamine desensitization" has been of no value in our hands. Likewise, nicotinic acide, vitamin B_1, vitamin B_{12}, liver extract, riboflavin, cortisone, ACTH, chorionic-gonadotropin, rauwolfia products, Thorazine®, Equanil®, et cetera, have been of no avail in the prevention or alleviation of the headache. The patient can therefore be spared a great deal of expense and inconvenience as well as frequent discouragement if treatment is limited to the relief of the headache when it occurs, rather than to fruitless attempts to prevent it. The headache tends to disappear during pregnancy and after the menopause but the hope of this liberation should not be extended to the patient, since disappointment may be very dangerous.

Allergic Headache

This, likewise, is a unilateral, paroxysmal vascular headache but it bears no other relation to the migraine syndrome described above and cannot be treated in the same way. There is no particular constitutional background and the family history is frequently negative. The disease occurs predominantly in males (about 80 per cent). It is a disease of adult life characterized by "crops" of severe excruciating pain occuring several times a day for a period of six or eight weeks, followed by several months of complete freedom. The most common time for the headache to occur is between 2:00 and 4:00 a.m. It builds up rapidly, reaching its height in ten to thirty minutes, and the pain is excruciating. Patients who have suffered from renal colic and gallbladder colic say that that pain is much less severe than the allergic headache pain. The headache is frequently accompanied either by ptosis or squinting

of the affected eye with inflammation of the conjunctiva. Stuffiness of the nose on the affected side and vasomotor changes in the face are common but not essential to the diagnosis.

Since the pain is of short duration, no medication designed to relieve it is likely to be of much assistance because of the time necessary for drugs to act. Treatment should therefore be devoted mainly to prevention of the headache. This type of headache, in our experience, is always due to ingested food allergens and can be uniformly prevented by discovering the nature of the allergen(s) and their elimination from the diet. This requires an extremely rigid elimination diet of the Rowe type. In evaluating the effectiveness of the diet, it must be borne in mind that headaches will frequently continue for seven to ten days following the elimination of its cause. Therefore the starting point must be a very meager diet which will be followed rigidly for two weeks in spite of continuing headache. This is frequently a very traumatic procedure both for physician and patient, because the initial diet which we recommend consists usually of a single form of meat (preferably one which the patient does not eat frequently), rice, maple sugar and canned pears. Only the patient who has been disabled by severe excruciating headaches is likely to tolerate this diet for the two-week period required, but the potential rewards are sufficiently great so that it should be worth while. At the end of two weeks' time, the patient will usually be free of his headache. At this time new foods are added one at a time. Each time that a new food is added the patient eats that new food three times daily for three days. If at the end of the third day no headache has been produced, this food may be considered "safe" and added to the list from which he may draw at any time. It is our custom to save until late in the program those foods which are most commonly allergenic (chocolate, milk, wheat, onion, nuts and citrus fruits). These allergies are frequently multiple. Likewise, if the headache is precipitated by the addition of the allergenic substance, it should be remembered that this headache is likely to recur for several days. The patient should therefore return to the diet which he was using just preceding the occurrence of his headache and continue that until he has been free for several days before adding new foods. Injections of histamine in our hands, have not benefited these patients.

Hypertensive Headache

The headache accompanying hypertension also belongs in the vascular group. It is presumably due to distention and excessive pulsation of the basilar arteries of the brain. It is not necessarily related to measurable cerebral edema since it occurs just as frequently without objective signs of increased intracranial pressure as it does when those signs are present. This headache is, of course, seen only in patients with hypertension particularly of the diastolic variety. The degree of the hypertension is not necessarily proportional to the degree of the headache. A somewhat similar headache is occasionally seen in patients with arteriosclerosis and marked increase in the pulse pressure even though the diastolic pressure is not elevated.

This headache occurs quite regularly in the morning on awakening. It is felt as a dull, annoying discomfort either in the occipital, vertical or frontal regions. It usually does not show any particular predilection for one side of the head and is not accompanied by nausea or vomiting unless the hypertension is of the malignant nephrosclerotic type with nitrogen retention and increased intracranial pressure. Relief of this type of headache frequently occurs with satisfactory medical management of the hypertension. If conservative attempts to reduce the hypertension have been unsuccessful and if the headache is disabling, this pain in itself may then serve as an indication for sympathectomy. The hypertensive headache almost always disappears following sympathectomy, even if the postoperative correction of the hypertension is not entirely satisfactory.

Single episodes of hypertensive headache will respond to the oral administration of vasoconstricting agents, such as ergotamine tartrate, but these medications should not be used because of the dangers of adding to the vasoconstriction already present. This point is emphasized because occasionally a patient with a mild hypertension is treated with ergot on the assumption that the headache is due to migraine rather than the hypertension. It has been our experience that patients with migraine do not have hypertension.

Menopausal Headache

We choose to apply this term to a paroxysmal vascular headache occurring shortly after the menstrual periods have ceased. Although many headaches occur at the time of the menopause most

of them are of the simple tension variety, and the true vascular headache occurring as part of the general vasomotor instability of the menopausal age is relatively uncommon. When it occurs, the headache itself imitates very greatly the migraine pattern. It is paroxysmal, one-sided and frequently awakens the patient at night. It is frequently accompanied by nausea and vomiting but not usually by scotomata. The pain is very severe. Single attacks can again be relieved by the use of vasoconstrictor drugs in the same way as for migraine, but prevention is much more worth while and effective. The oral administration of small amounts of estrogenic substance in cyclic fashion is uniformly effective if the diagnosis is correct. We recommend from ½ to ¾ mg. of Stilbesterol daily for twenty-one days, followed by a ten-day rest period. The dose is then resumed at somewhat smaller amounts and the cycle repeated until the smallest amount which will control the syndrome is ascertained. Usually, after four or five months, the dose can be progressively diminished to the vanishing point and the syndrome does not recur. It should be reemphasized that most of the headaches which occur at middle age, however, are not of the true menopausal type but are rather secondary to the emotional difficulties of that stage of life. The true menopausal headache never occurs until the menopause is completely established.

Cerebral Aneurysm

Cerebral aneurysm should be suspected in any patient suffering from recurrent unilateral headache which always occurs on the *same* side. Many patients with true migraine or with allergic headache will state that their headache is *usually* on one side or the other, but there will have been occasional episodes when the contralateral portion of the head has been involved. The headache of cerebral aneurysm is also frequently accompanied with objective neurologic signs, such as ptosis of the eyelid or temporary paralysis of one of the extraocular muscles producing diplopia. It is not uncommon for the first warning of cerebral aneurysm to be given by the occurrence of a subarachnoid hemorrhage. It is a matter for very careful judgment to decide in any patient suffering from recurrent vascular headaches when cerebral angiography may be indicated in an effort to localize the lesion and, therefore, make it available to surgical attack. Our experience with cerebral angiography has led us to believe that it is a relatively safe procedure, since we have seen no untoward results. However, transient hemiplegia has been reported and the risk must be recognized and weighed before this procedure is undertaken. The pain of the headache due to a cerebral aneurysm can sometimes be relieved by the use of vasoconstricting agents so that the therapeutic response should not be employed as a guide to diagnosis.

Summary

It has been our purpose to attempt to differentiate among several different types of vascular headache in order that research studies designed to elucidate the problem may be more properly interpreted. Likewise, proper distinction among the various types of vascular headaches will be of assistance in applying appropriate therapy for the relief of the patients symptoms.

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Obstruction of the Gastrointestinal Tract in the Newborn

By Egbert H. Fell, M.D.
Chicago, Illinois

DRAMATIC progress has been made in recent years in the diagnosis and treatment of obstructions in the gastrointestinal tract of the newborn infant. The developmental pathology, the physiology and nutritional requirements of this age group are better understood. The advances made in anesthesiology and in the surgical techniques have changed former hopeless situations to problems that now have favorable prognoses. To improve the survival rate further, earlier diagnoses and surgery are essential, and this requires team work of the highest order during the first two days of life, preferably the first day.

The doctor caring for the newborn has a tremendous responsibility in making a careful physical examination at the time of birth and repeated observations during the first day of life. Abnormalities in swallowing, coughing, respiratory difficulties, vomiting, abdominal distention or inability to pass meconium should receive prompt attention and the cause determined. Inspection, palpation, and percussion with a careful study of the material regurgitated or vomited, and passed per rectum, frequently are requirements for a diagnosis. Radiograph of the chest and abdomen may clinch the diagnosis. The use of barium by mouth in most cases is contraindicated and is definitely harmful, but a carefully given thin solution of barium as an enema may be of great help to rule out a malrotation or obstruction of the large bowel. In pre-operative preparation it is essential to prevent aspiration of gastrointestinal content by keeping the gastrointestinal tract above the obstruction clean and decompressed. Parenteral fluids are administered to maintain nutrition and fluid balance. Blood replacement during surgery has proven of utmost value, and its administration should be begun in the operating room just prior to surgery.

Dr. Fell is the Attending Surgeon, Presbyterian and Cook County Hospitals, Chicago, and Clinical Professor of Surgery, University of Illinois College of Medicine.

Presented at the Twenty-Eighth May Clinic of the Ingham County Medical Society, Lansing, Michigan, May 3, 1956.

Atresia of the Esophagus

Atresia of the esophagus should be diagnosed during the first day or two of life. The infant with this anomaly is unable to swallow saliva or



Fig. 1. Radiographs of a day old infant, anterior-posterior and lateral views. Esophageal atresia and tracheoesophageal fistula. Arrows at top of films point to the blind esophageal pouch. The arrow in the lower part of the film, of the lateral view, points to air in stomach and small bowel.

the feedings offered. Gagging, coughing and cyanosis frequently accompany an attempt at taking water or formula, and saliva is seen draining from the angle of the mouth. The diagnosis can be easily made by passing a small soft catheter through the mouth into the esophagus. The obstruction will soon be evident and its location verified by radiograph taken in the anterior, posterior and lateral views after injecting through the catheter 2 to 3 cc. of diodrast (Fig. 1). It is wise to include the abdomen, chest and neck on the films. The atresia of the esophagus most commonly encountered is associated with a fistula between the trachea and the lower esophagus, and the radiograph in such a case will show a blind pouch in

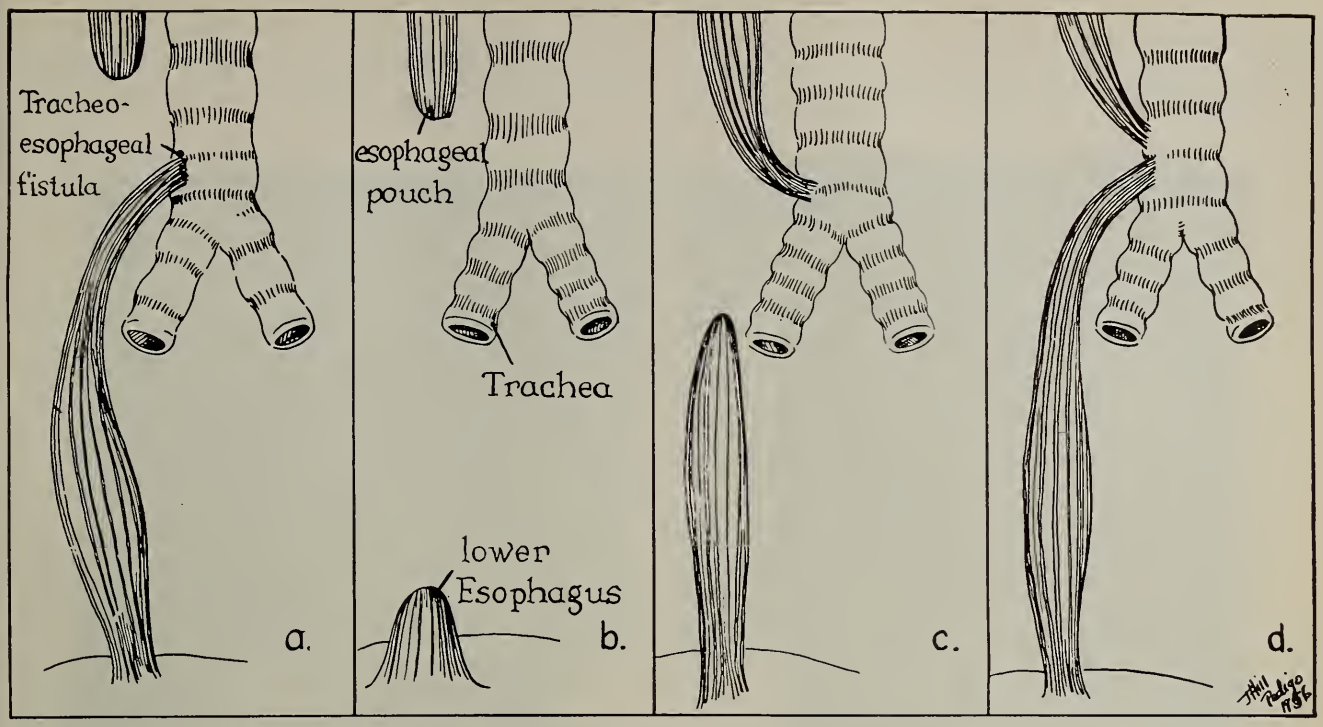


Fig. 2. Anomalies of the esophagus. *a*, esophageal atresia and tracheoesophageal fistula, the common anomaly; *b*, *c*, and *d*, rare anomalies. Knowledge of the entities is necessary for differential diagnosis and treatment.

the upper mediastinum and air in the gastrointestinal tract. If no air is present in the gastrointestinal tract, the lower end of the esophagus is blind, and this case may require more extensive surgical correction than the atresia with tracheoesophageal fistula (Fig. 2). Delay in the diagnosis, and the use of irritating contrast media to visualize the deformity, increases the possibilities of pulmonary pathology.

Aspiration pneumonia is one of the early severe complications of this anomaly. Prevention of this complication prior to early surgery is attempted by keeping the nasopharynx clean of saliva by frequent, gentle aspirations. The child is maintained in a semi-sitting position in an attempt to diminish the possibility of aspirating irritating gastric juice into the lung by way of the tracheoesophageal fistula. Surgical repair of this anomaly during the first two to three days of life, as described by Leven, Haight and others, gives a favorable prognosis and the only chance for survival.

Atresia of the Pyloric End of the Stomach

This anomaly is very rare but must be kept in mind in the differentiation of pyloric stenosis and duodenal atresia. The onset of symptoms occurs within the first twenty-four hours. The infant retains its feeding for short periods and then vomits the formula and gastric contents; no bile is present in the vomitus. The symptoms of pyloric stenosis usually occur two to three weeks after birth, and normal stools have been passed, indicating a functioning gastrointestinal tract. Atresia of the pyloric end of the stomach shows no air in the duodenum or in the lower gastrointestinal tract. A radiograph of the chest and abdomen aids in the localization of the distention of the stomach and reveals the absence of air in the small and large bowel. Barium studies are harmful and give no more information than the plain radiographic studies. In preparation for surgery the child's stomach should be kept empty to prevent aspiration of gastric contents and to prevent gastric distention at the time of surgery. Relief of the obstruction is essential in the first two to three days of life.

Atresia of the Small Bowel

The onset of symptoms occurs in the first twenty-four hours, and the bile-stained vomitus is usually most marked with atresias of the duodenum, while distention of the abdomen is greater if the atresia is in midjejunum or ileum. In the early period, peristaltic waves may be seen crossing the abdomen, from left to right in cases of duodenal atresia, or in a varied pattern if the jejunum or ileum is obstructed.

The infant does not pass normal meconium and inspection will show no bile or ingested constitu-

ents of the amniotic fluid. Farber's test will be positive.

A roentgenogram of the abdomen will show the patency of the anus and the character of the meconium. If there is no anal orifice, gas will fill the gastrointestinal tract within eight to ten hours,

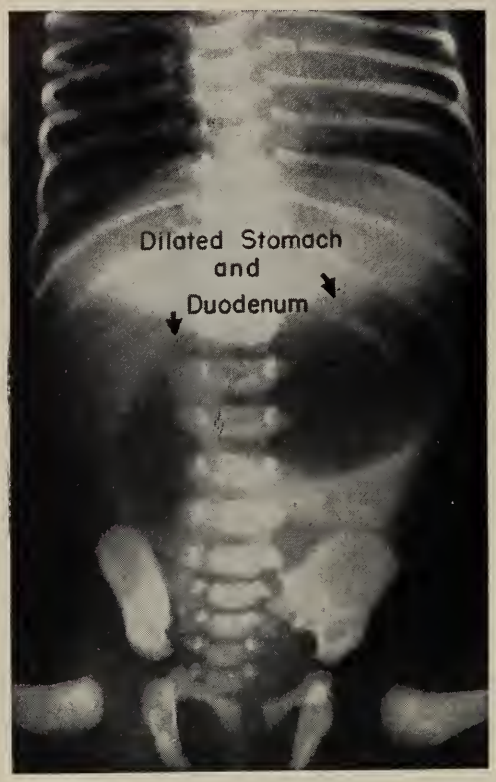


Fig. 3. Atresia of second portion of duodenum. X-ray film shows dilated stomach, first and part of the second portion of the duodenum. No air is seen in the lower gastrointestinal tract. Barium filling the distended stomach and duodenum would give no better detail for diagnosis and would be of added risk to the infant.



Fig. 6. A radiograph of a twenty-four-hour-old infant with pneumoperitoneum secondary to a perforation of a duodenal ulcer. Recovery followed surgical closure of the perforation. The x-ray film effectively differentiates the localization of the air.

stomach and small bowel distended with air to the point of obstruction but with no air in the bowel below this level (Fig. 3). Barium studies by the oral route give no more information than is gained by the original film, are dangerous, and compromise the life of the infant. A low pressured carefully administered barium enema is informative and helpful, in that it reveals the patency and position of the colon, (Fig. 4).

Surgical relief of the obstruction is best accomplished in the first twenty-four to forty-eight hours; however, attempts at saving the desperately ill older infant are at times rewarding and should be carried out as gently and rapidly as possible.

Obstruction of the Large Bowel

Atresia of the colon is rare except in the rectal and anal region. Inspection at the time of birth should satisfy the examining doctor as to the at which time the infant can be x-rayed (Wangensteen test). The infant is held by his feet, head down, and a thermometer or lead pencil is held at the anal dimple. Films taken in the anterior-posterior and lateral views will reveal the level of obstruction, and the distance to the anal dimple from the air level in the blind end of the rectum. If there is an anal opening and no meconium, digital examination or passage of a small catheter may reveal an atresia of the rectum.

Surgical relief of the obstruction is indicated within the first twelve to twenty-four hours of life, and varies from a simple incision and dilatation of a thin membrane over the anus to a major surgical procedure of mobilizing the blind rectum and bringing it down to create a functioning anal orifice. Fistulae may be present between the reactum and urinary bladder or vagina and may complicate the procedure.

Other conditions causing obstruction of the gas-

trointestinal tract in the newborn are. (1) Malrotation of the large bowel; (2) stenosis of the small bowel; (3) intra-abdominal or retroperitoneal tumors; (4) diaphragmatic hernias; (5) congenital interabdominal bands; (6) perforation of the gastrointestinal tract with pneumoperitoneum; and (7) appendicitis. These entities may be as acute and as early in onset as the atresias, but usually are less severe in symptoms or signs and later in onset. In the first five conditions the bowel is distended above the partial obstruction and there is a pattern of air in the lower bowel. The meconium is normal. In infants with a diaphragmatic hernia, abnormal breathing and chest findings are clearly evident, before the confirmatory roentgenograms show the bowel within the chest (Fig. 5).



Fig. 4. Films of a twenty-four-hour-old infant with an atresia of the midjejunum. Left: The film of chest and abdomen shows dilated stomach and some small bowel. The diaphragm is pushed up. Right: This film was taken after a thin solution of barium was given by rectum. It reveals the colon to be in a normal position; its lumen is very small and is not functionally connected to the dilated small bowel.



Fig. 5. Radiographs, anterior-posterior and oblique, of an infant showing bowel in the right chest cavity. Barium by mouth is not necessary for diagnosis and is definitely dangerous to the life of the infant.

Recently three desperately ill, one-day-old infants with obstructive symptoms and silent, markedly distended abdomens showed by x-ray examination a great deal of intraperitoneal air. One recovered following closure of a perforated duodenal ulcer (Fig. 6); the others died following

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Psychophysiologic Gynecology

By Mary E. Giffin, M.D.
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THIS paper reflects the attitude of the physician-turned-psychiatrist who attempts to remember her days of stethoscope and speculum, yet who has subsequently struggled with the analysis and treatment of psychiatric conditions. Her psychophysiologic approach considers the concepts learned in the laboratory, but insists upon equal consideration of the postulates of psychopathology. By means of the research and clinical experience of psychiatrists of many schools of thought, certain basic psychiatric principles have become clear; it is the objective of this paper to relate them to a few chosen gynecologic problems.

Basic Psychiatric Principles

It would be difficult to summarize a comprehensive psychiatric point of view more succinctly than does Ziskind[1] in his book, *Psychophysiologic Medicine*. He wrote, "I stress what is common to most psychiatric thinking, namely that the needs of human beings, when frustrated, result in personality conflicts; that the process of social adaptation is universal, but often unsuccessful; that early life conflicts endure; that persistent conflicts may crystallize into character patterns; that unresolved conflicts may be transmitted into symptoms of organic illness through the autonomic nervous system. These do not explain all psychopathology, yet they suffice as a set of working premises."

Such are the basic concepts held by all psychiatrists. They are principles to be kept in mind, as surely as are the fundamentals of fluid balance or as is the relationship between the secretion of estrogens and the ovarian follicle. For accurate management of all medical and surgical conditions, it must be remembered that the personality in which the illness occurs may determine not only the response to symptoms and treatment but also the very symptoms themselves.

In the proper diagnosis and treatment of *gynecologic* conditions, such an approach is particularly important because the anatomic parts with which one deals are symbols and facts of gender, sexuality and motherhood. If early emotional conflicts have led to insecurity about the feminine role, or indeed bitterness about being born a woman, the pelvis and its organs are particularly adapted to the expression of such feelings. In no other specialty are the psyche and the soma so naturally suited for the expression of the unresolved problems of infancy, social adaptation and sexuality as they are in gynecology. Particularly, the poorly integrated dependency and psychosexual problems of the adult woman find a natural outlet in pain, abnormal function or tissue changes in the pelvis and its contents. The cases to be presented will reflect only a few of the many diagnostic, therapeutic and preventive aspects of gynecologic problems. It is hoped that these few will be extrapolated in the minds of each reader to include patients of your own.

Stress and Disease

In recent years there has been much emphasis on the relationship between stress and disease. All of us recognize that man is vulnerable to other living forces which threaten to invade or to destroy a host, and that he may be injured or annihilated by so-called acts of God. It has been the particular emphasis of psychophysiologists such as Wolff[2] to point out that "man is further vulnerable because . . . he reacts not only to the actual existence of danger, but to threats and symbols of danger experienced in his past which call forth reactions little different from those to the assault itself."

Because his physical, psychologic and histologic adaptations are limited, man's responses to many sorts of trauma and threats may be similar, depending more upon the individual's past experience than upon the noxious agent. It is of interest also that the *protective* reaction may be far more damaging to the individual than the effects of the noxious agent itself. This is a phenomenon seen in the miliary spread of tuberculosis as well as in the eruption of a malignant psychosis.

Presented at the Twenty-Eighth Annual May Clinic of the Ingham County Medical Society, Lansing, Michigan, May 3, 1956.

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The thesis that threats and symbols of danger call forth reactions little different from those of assault itself can best be supported by an example. The reaction of human skin to a blow and to the threat of a blow has been neatly illustrated by the experiments of Graham[3] among persons suffering from hives. In his experiments we see reflected the synergistic effect of simultaneously introduced chemical and emotional stimuli upon capillary activity. Careful studies of blood flow in the vaginal wall have been carried out by Duncan and Taylor[4] in which changes similar to those seen by Graham have been produced. Such experiments are laying the groundwork for more accurate understanding of the role of emotional conflicts in pelvic congestion.

There remains still to be done work of a similar nature on uterine vessels and glands, but it seems safe to postulate that similar kinds of responses will be observed. It seems clear to the psychiatrist that women with psychosomatic gynecologic problems have experienced not only the usual insecure intrafamilial problems common to all neurotic patients but specifically that they have been lacking in a close relationship to the mother—a solid identification with the mother-figure is, of course, necessary before the adult feminine role can be accepted without mixed feelings.

As is true of all psychosomatic illnesses, there must then occur a precipitating life situation, acting as does a single chemical crystal upon a supersaturated solution—the experience of this stress precipitates out of solution basic conflicts and leads to pain or dysfunction which may then seem as insoluble as the chemical solid of the laboratory. Such stresses, among patients with gynecologic difficulties, seem always to be ones which make particular demands upon the patient to function specifically as a woman. Frequently, it is pregnancy, sometimes sexual demands, nursing or changing social responsibilities. By comparative studies among persons in whom, for instance, hives and pelvic congestion develop, we may eventually be able to delineate the specific emotional factors in symptom choice of patients with gynecologic disorders.

Let us now attempt to correlate laboratory and theoretic material with clinical conditions. We shall discuss problems in interviewing, examination and diagnosis as exemplified by patients with pain in the right lower abdominal quadrant, postcoital bleeding, pelvic pain and pruritus.

Interviewing

For the psychophysiologically oriented, history taking is an all-inclusive project. For instance, the characteristics of a pain pattern, its intensity and relief must be correlated with the situational setting and its personal meaning.

Case 1.—A twenty-one-year-old, single registered nurse complained of intermittent pain in the right lower abdominal quadrant for three years, with increasing severity in the three weeks prior to her visit to the clinic. The episodes had occurred about every two weeks, and lasted from a few hours to several days, with extension into the right thigh and aggravation by exercise. There had been no associated vomiting until two weeks prior to her admission, but since then it had been continuous, as had the pain. Narcotics had offered the only relief; three laparotomies had been of temporary benefit only. From the time of the last surgical procedure pain had been almost constant, and the patient's nursing career was now jeopardized because of frequent absences from duty. There had been no diarrhea, jaundice, fever, chills or erythruria, and there were no radicular characteristics to the pain.

Physical examination reflected the recent loss of 20 pounds, and there was marked deep and superficial tenderness over the scar in the right lower abdominal quadrant, with some associated muscle spasm. Rebound tenderness was very marked, with referral to the right lower abdominal quadrant. Pelvic examination revealed a few nodules in the cul de sac and thickening of the parametrium, particularly on the right, where a 2-cm. ovarian cyst could be palpated. Results of physical examination otherwise were negative. Urinalysis, routine laboratory studies and roentgenograms of the thorax, lumbar part of the spinal column and colon disclosed no abnormality. A roentgenogram of the kidney, ureter and bladder and an excretory urogram likewise revealed nothing significant. Additional surgical procedures were considered with a view toward removal of the right ovarian cyst. In view of the previous multiple surgical procedures, however, psychiatric inquiry was requested.

Psychiatric examination revealed a very bland, personable young woman who described her surgical procedures in exquisite detail. She cooperated unwillingly during the psychiatric interview, but she did remember that her first pain actually had occurred two years prior to the appendectomy. At first she said that no unusual events had occurred at that time. Later, however, she recalled that her attack of pain had coincided with the fact that her adopted brother had left home; she had felt lonely and had become nauseated; pain gradually developed in the right lower abdominal quadrant. She had remained symptom-free until two years later, when she awakened with nausea and vomiting, later associated with pain in the right lower abdominal quadrant for which appendectomy was performed within twenty-four hours. A normal appendix was found. With considerable difficulty she recalled that the day before that attack she had received word that her adopted brother was engaged. After the appendectomy the pain continued intermittently for

the next two years, "for no apparent reason," although she did smile when she recalled that the severe attack leading to her second laparotomy had precluded her attendance at her brother's wedding. Finally, she recognized that subsequent severe attacks were consistently associated with experiences in her brother's life about which she had mixed feelings. Three weeks prior to coming to the Mayo Clinic she had received news of the birth of a niece, an event which presumably pleased her. The long-distance call conveying the news to her, however, was interrupted by an episode of vomiting; there followed the pain which caused her to seek examination.

Subsequent psychotherapy sufficed to correlate the feelings of the patient with early sex play and an intensely close relationship between herself and the adopted brother. It was of interest that the pain subsided as soon as definite psychiatric interviewing was begun, and that it returned on two occasions—both of which coincided with interviews in which she abreacted her confused and intensely mixed feelings for her brother. Since the time of psychotherapy she has been symptom-free, and subsequently has married, apparently successfully. Additional pelvic examinations have revealed no increase in size of the ovarian cyst.

Comment.—This is an example of a young woman who had undergone much surgical treatment, and in whom discomfort in the right lower abdominal quadrant reflected painful emotion about the loss of a brother to whom she had been pathologically close. Careful interviewing revealed a time relationship between the onset of attacks and particularly disturbing contacts with her brother. Subsequent psychotherapy permitted understanding of basic problems with the father which set the stage for difficulties with the brother. Such treatment precluded the necessity for further surgical treatment and permitted a more adequate adjustment for this talented and intelligent girl. Her children may have been saved a neurotic adjustment as well.

Examination

The psychophysiologic approach also can be applied to examination per se.

Case 2.—A forty-nine-year-old woman presented herself for examination because of bizarre seizures. The initial examiner was startled when he found that a major attack was precipitated by his attempt to conduct a pelvic examination. The seizures were sufficiently bizarre to stimulate a request for psychiatric examination early in the course of the studies done for the patient. This revealed a very traumatic background, including a sexual attack by an orphanage physician when the patient was seven years old. There was a history of postcoital bleeding; careful gynecologic examination obviously was necessary. In the tradition of psychophysiologic medicine, the gynecologist performed the examination while the psychiatrist encouraged the patient to ventilate unpleasant memories which came to mind during the procedure. With considerable depressive, angry affect, the patient recalled the cruel sexual attack on the part of the physician and the brutal whippings which she had received at the hands of the orphanage governess—even for such normal physiologic processes as menstruating. The pelvic examination was satisfactory; no seizure occurred and the patient shared considerable affect. A later examiner, skeptical of the efficacy of emotional abreaction, started to perform a pelvic examination, only to find it necessary to call the neurologist to control the hysterical seizures. The psychiatrist later interviewed the patient about her fears during this examination; she frighteningly commented on the angry look on the physician's face and the fact that "I seemed to be being blamed for something which I hadn't done." These were succinct reflections of the angry parent-figures of her childhood and of her role, not merely in relationships in general. She now shared the fact that she had been subjected to incestual rape at the age of six years, and she reported that she had been blamed by the father for having led him on, the usual situation in such cases.

Comment.—Most patients fortunately have less traumatic backgrounds and less bizarre symptoms than the woman in this case. However, the principle remains the same. Rarely does a patient become more relaxed by an order to do so. Simple conversation, or in special instances, inquiry into the fears and associations of women such as this patient permits more adequate pelvic examination.

Diagnostic Problems

Diagnostic problems of course remain a major concern to us all. Awareness of psychophysiologic interchange frequently leads to more accurate evaluation. Three cases will reflect this fact.

Case 3.—A forty-year-old woman who complained of constant pain in the pelvis and thighs, associated with dysmenorrhea and dyspareunia, presented herself for diagnosis. The uterus was found to be irregular and slightly fixed anteriorly; general pelvic tenderness was noted. A diagnosis of adenomyomatous uterus was made, but surgical intervention was considered unwise in view of the history of previous interventions, and the poor menstrual and sexual adjustment of the patient.

Psychiatric interview revealed a large, deep-voiced woman, with masculine gestures who took obvious pleasure in the fact that she carried as much of a load as her husband in the family lumber business. She related a typical tomboy history and talked of the menarche as "the greatest scare of my life." Sexual intercourse had always felt like trauma—"as if I were being torn apart"—and there was always associated vaginal spasm. Because of the severity of dysmenorrhea she had under-

gone numerous surgical repairs, dilatations and curettages, and finally presacral sympathectomy had been done, all without relief. There had been three miscarriages, each followed by deep depression, and at the interview she verbalized guilt about living with her husband, since she could not have children. It was of interest that her first spontaneous comment about her father was that he loved babies, and then, with tears in her eyes, she said she did not think he could have lived without an infant around the house—there had been thirteen. She recalled her attempts to be like her father and her conscious wish to be a boy, and then her resolution of the conflict by her awareness that "at least, women can have babies." She never had liked housework, although she had always thought that a baby around the house would change things. With great seriousness and amazing accuracy she said, "I guess the only reason I've accepted being a woman at all is that a woman could have children—but not me, I guess."

It seemed reasonable that the pain of this woman was merely a menopausal exaggeration of the long-term difficulties in feminine identification; now, with the advent of the menopause, she knew she never would have babies. Treatment was directed toward avoidance of unnecessary surgical procedures and giving her some limited understanding of important interpersonal relationships. She reported, a year later, that her symptoms were less distressing, and that her marriage seemed happier since she had left the conduct of the lumber business to her husband.

Some of the most difficult diagnostic problems are those involving burning or pressure feelings within the pelvis.

Case 4.—Recently a thirty-one-year-old woman was referred from Alaska by a general practitioner for, as she said, "surgery to cure all my troubles." She complained of a sensation of pressure in the lower part of the abdomen, worse at the time of menstruation. In this instance the gynecologic consultant found no abnormalities in the pelvis, and psychiatric referral was made. The patient was suffering from an acute anxiety state coincident with a most unhappy marriage, in which a wartime romance had resolved itself into life on an Alaskan island, with essential sequestration with the three children; the final blow had been a severe beating, including kicks in the stomach, at the hands of her childishly immature, sailboat-loving husband. Simple ventilation of her anxieties and clarification of what she considered to be the essentials for a continuing marriage were sufficient to clear the symptoms. Of course, many problems still remained, but with proper ventilation physical perception of pain was converted back to conscious anxiety, in which condition it could be dealt with more constructively.

Case 5.—The foregoing case is a far cry from the somatic delusions presented by a forty-four-year-old registered nurse who complained chiefly of vaginal itching. When she was asked to elaborate, she told of itching which seemed to move up the back, then to the top of the head, down the forehead and out the right nostril. She described the use of a magnifying glass to identify a spiral bug which extruded from both the rectum and the nostril and which looked like the spirochete of syphilis. She also complained of water "flowing through the muscle planes, collecting in her right hand and erupting in a water blister." Of her menstrual periods she said that "they can't be regular menses; the blood's just oozing through my vaginal walls." As a final complaint she said there was "pus dripping from the rectum, like a Murphy drip."

This woman had undergone laparotomy for "intestinal obstruction," anterior resection of the colon, appendectomy and finally perineorrhaphy for relief of the pruritus; she now demanded scraping and cauterization of the vagina and rectum for the presumed discharge. The bizarre and fixed nature of the complaints, and the results of psychiatric examination of the mental status indicated a paranoid reaction with delusions which precluded helping this patient by any gynecologic procedures. In fact, it was indicated that even minimal surgical tampering might lead to a psychotic episode. An effort, however, was made to acquaint her with the psychologic basis of her symptoms. Angrily and superciliously she said, "You can think that's my trouble if you want—but right now you've got yourself an invitation to my autopsy."

Comment.—This case reflects the bizarre descriptions of somatic delusions presented as physical symptoms by many ambulatory psychotic patients. Careful medical and gynecologic examinations must of course be carried out, but medications, injections and surgical procedures for relief of such subjective discomfort not only will not help but may precipitate psychotic behavior sufficiently flagrant to necessitate institutional care.

Summary and Conclusions

The examples given are but a few of the psychiatric aspects of gynecology. I have chosen cases primarily of a psychiatric nature, but merely for the sake of emphasis. Equally important are the truly psychosomatic conditions, such as dysmenorrhea, or those in which a psychiatric illness coexists with a serious organic condition of the pelvis. Patients with such conditions require a combined diagnostic and therapeutic approach in which proper quantitated attention is given to emotional problems, organic changes, medication, psychotherapy and surgery.

My emphasis has been on the psychophysiologic approach to gynecologic problems. I do not urge less emphasis on the soma, but rather, more on the psyche, and particularly upon the individual

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The Open Airway

By Egbert H. Fell, M.D.
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EVERY doctor, regardless of his specialty, who recommends or performs surgical procedures, should be concerned with the patient's airway and the ability of the patient to have a free exchange of gases as in a normal respiratory system. This is essential before and during surgery so that no untoward results occur. The co-operation of the surgical and anesthesia services in each hospital in the study of the importance of the open airway will do much to lower the morbidity and mortality of surgical patients. Most hospitals do not have an organized experimental laboratory, but one can easily be set up for this important study.

Intratracheal intubation of the dog is essential and, after the chest is opened, positive pressure is maintained by the anesthetist. For demonstration purposes a midline, sternal incision is best. The pericardium is opened, completely exposing the heart and region of the great vessels. The anesthetist will now play the important part in the demonstration. Attention is called to the free airway and the bright red color of the blood and the well oxygenated appearance of the cardiac muscle, lungs and other tissues. Various methods of producing obstruction to the free exchange of oxygen can then be tried showing how easily and rapidly cyanosis and cardiac irregularities develop. When the tracheal catheter is completely occluded, the heart rate speeds up, cyanosis develops, the heart dilates and slows. One marvels that the heart does not rupture, it becomes so distended and cyanotic. If at this time the airway is opened and oxygen is delivered to the lungs and the waste products removed, a dramatic response is seen. The heart receives oxygen and at once it renews its work with great vigor, cyanosis clears, and the heart size returns to normal. The importance of this open airway to the cyanotic, dilated heart that is at the point of arrest has been most beautifully shown.

The airway, again, should then be completely closed off allowing at this time the heart to pass through the stages mentioned to a complete arrest. The heart will be markedly dilated, cyanotic, and without contraction. When allowed to stay in this condition one-half to one minute, an open airway alone may not be sufficient to resuscitate the heart action. Manual compression of the heart should then be started so that the heart is completely emptied by forcefully compressing the heart and then releasing it, thus allowing the heart to refill. Just as soon as it refills to normal size, rapid vigorous compression should be repeated. Systole and diastole must be continued by compression and relaxation of the hand or hands so that good color returns to the tissues and a pulse can be felt in the peripheral vessels. The arrest may be overcome in two or three compressions, or a considerable length of time may be required to restore cardiac rhythm.

Careful observation of the cardiac muscles is essential to differentiate between complete cardiac arrest and ventricular fibrillation. The appearance of the fibrillating ventricles has been described in various ways: worm-like motion of the muscles, independent motion of each muscle bundle, so that no function of the ventricles occurs. When ventricular fibrillation is seen, cardiac compression must be instituted until the defibrillator is ready to function. (A defibrillator should be a part of the emergency equipment of each surgical department.)

Ventricular fibrillation may not occur following the experiment described, and in our experience an electric shock may be required to cause the heart to go into ventricular fibrillation. This shock is produced by clamping one electrode to the neck and the other to the groin of the dog and allowing the electric current received from a wall plug to pass through him, or it can be administered by way of the defibrillator. Two or three shocks may be necessary in the larger dogs to produce fibrillating ventricular muscles. When this occurs it is easily seen that the heart is not functioning, yet all muscle fibers are in independ-

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Presented at the Twenty-Eighth May Clinic of the Ingham County Medical Society, Lansing, Michigan, May 3, 1956.

Urologic Aspects of Hypertension

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IT is now generally accepted that hypertension is not in itself a disease, but rather a symptom produced by a variety of conditions. Like fever it has many causes, and like fever it returns to normal if the cause is found and corrected. Careful search for the cause is, therefore, most important and proper studies should be carried out before resorting to the new antihypertensive drugs which have recently appeared on the market.

Cases of hypertension fall into three large groups: (1) Essential hypertension which includes the large number of cases of as yet unknown cause; (2) Renal hypertension which is due to specific demonstrable renal disease of varied type; and (3) Nonrenal hypertension which includes that due to adrenal tumors, neourogenic causes and vascular lesions such as coarctation of the aorta. The urologist is concerned particularly with the renal hypertensions and those cases due to adrenal tumors, notably pheochromocytoma.

Richard Bright, as far back as 1827, first suggested the relationship of arterial hypertension to disease of the kidney, and in 1879 Grawitz and Israel by partial nephrectomy in rabbits produced hypertrophy of the heart which they attributed to hypertension. In 1905, Passler and Heinke confirmed these findings by repeating this procedure in dogs. Clinical interest in renal hypertension may be said to have started as the result of the experimental work of Goldblatt in 1934.

Working with dogs and monkeys, he showed that when the renal artery on one side was partially occluded by a specially devised clamp, hypertension resulted which usually tended to return to normal after a time, although in some instances it persisted for as long as two years. Removal of this ischemic kidney resulted in the return of blood pressure to normal. Constriction of both renal arteries or constriction of one side with removal of the opposite kidney resulted in sustained elevation of both the systolic and diastolic pressures of the blood. Hypertension in such experimental animals occurs without detectable diminution in renal function. This illustrates the difficulty in detecting these cases clinically by present renal function tests, as we shall illustrate with subsequent cases.

That the ischemic kidney is responsible for the elevated blood pressure is indicated by the following facts:

1. If the ischemic kidney is removed, the blood pressure promptly returns to normal; and the same is true if the clamp is removed from the renal artery.

2. If the kidney is transplanted to the neck or groin and then rendered ischemic, high blood pressure still results.

3. An ischemic kidney transplanted into a normal animal produces an elevated blood pressure.

Two possible mechanisms were postulated to produce the hypertension: (1) Nervous reflex affecting the general vasomotor apparatus, and (2) a humoral mechanism which postulates the formation of some pressor substance by the kidney which gets into the general circulation.

By a variety of experiments, Goldblatt, Page and others disproved the nervous mechanism. The humoral mechanism is now generally accepted in renal hypertension, the elevated blood pressure being due to the presence of vasoconstrictor substances in the blood.

The present-day hypothetical concept of the mechanism is as follows: With renal ischemia or under certain other conditions such as shock, the kidney elaborates renin which is probably produced in the renal tubules. It is a protein and has no vasoconstrictor activity of its own, but it acts on renin substrate (hypertensinogen) to produce angiotonin (hypertensin) which has pressor and vasoconstrictor activity due to direct action of the muscle of the arterioles. Angiotonin in turn is destroyed by aniotonase (hypertensinase). A pressor and vasoconstrictor substance is

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Presented at the Twenty-Eighth Annual May Clinic of the Ingham County Medical Society, May 3, 1956, Lansing, Michigan.

present in the renal venous blood of animals made hypertensive by partial constriction of the renal arteries and also in the venous blood of the acutely ischemic kidney.

Another experimental method for the production of hypertension which is of particular interest to the urologist was demonstrated by Page in 1939. He wrapped the kidney of animals with cellophane which resulted in the formation of a dense, thick, fibrous hull around the kidney. Hypertension in the animals resulted which usually was relieved by removal of the kidney. Page pointed out that the hypertension did not result from compression of the renal artery but rather from changes in intrarenal hemodynamics produced by the firm, unyielding hull. He has suggested that perhaps a certain "pulsing" of the kidney is necessary for normal function and interference with this may be the cause of hypertension. The clinical implications of these important experiments will at once be apparent, especially to the urologist.

Hypertension is due to increased peripheral resistance to outflow of blood. As the result of this resistance, there is an increase in diastolic blood pressure which represents the residual impelling force in the circulation during cardiac diastole. Invariably there is an associated elevation of the systolic pressure but the essential criterion is an elevated diastolic pressure. Hypertension may be said to exist when the diastolic pressure is in the range from 90 to 100 mm. Hg or higher.

The experimental work of Goldblatt stimulated great interest and perhaps hyperenthusiasm to apply it to the human patient with hypertension. Many reports appeared on hypertension associated with unilateral renal disease and response to nephrectomy. After almost twenty years the matter has run the gamut of clinical test and sober evaluation, and certain generalizations seem justified:

1. In many patients the exact counterpart of experimental hypertension exists and permanent relief may follow nephrectomy.

2. Good statistical evidence would seem to indicate that the incidence of hypertension in patients with urologic disease is no higher than that in the general population. It should be pointed out, however, that a considerable number of the former group (perhaps 25 per cent) will enjoy return of the blood pressure to normal after surgical removal of the diseased kidney.

3. In parenchymal disease of the kidney, nephrectomy should be advised on the basis of the existing disease rather than on a promise of return of normal blood pressure.

4. In the case of certain vascular lesions, however, it now appears that the reverse may be true, and nephrectomy may be necessary for the cure of the hypertension even with an apparently normally functioning kidney.

5. In certain selected cases it may be possible to restore normal blood pressure by means of renal arterial graft to correct the arterial obstruction.

As we have indicated, abnormal elevations of blood pressure may be associated with many different diseases. We are concerned in this discussion with those causes which careful urologic examination may help to identify and for which appropriate surgical intervention may hold promise of cure. Most of these will be examples of renal hypertension arising from disease in one kidney, but we shall also include adrenal tumors, particularly the pheochromocytoma, in which the surgical treatment as well as certain diagnostic measures can best be performed by the urologist.

Methods of Examination

It is assumed that each patient will have a careful and complete physical examination including a funduscopic eye examination. More than one blood pressure determination should be made; and in some instances of suspected coarctation of the aorta, pressure determinations should be made in the legs as well as in the upper extremities.

All patients with hypertension should have an intravenous urogram. This will provide a visual estimate of renal function and may point to the presence of unilateral kidney disease. In viewing the urogram films we have learned to attach some importance to the total renal mass, especially if it is asymmetrical. Cystoscopy and retrograde pyelograms will be necessary in many cases.

Ureteral catheterization with differential function, by means of dye excretion such as PSP, can be done although we have largely abandoned this method. An important aid, especially if a circulatory defect of a kidney is suspected, is a determination of electrolyte concentration and urinary osmolarity of urine samples collected from

each kidney. Diminished values on one side speak in favor of an obstructive arterial lesion. This may be of importance for we have seen instances where the urogram was apparently normal in the presence of malignant hypertension due to thrombotic occlusion of two main branches of the renal artery.

Of greatest value in the recognition of renal arterial obstruction is the angiogram obtained by means of translumbar aortography. We have employed the simple syringe technique and do not employ large quantities of contrast medium. We have used each of the various radiopaque materials but recently have preferred Hypaque® as being the least irritating. Except in extremely irritable and high-strung patients the procedure can be readily performed using local anesthesia. After the aorta has been successfully punctured, 10 cc. of a 25 per cent solution of Hypaque is quickly injected and a film made to check the correct location of the needle. If the needle is in the proper position, 10 to 15 cc. of 50 per cent solution is then injected for the final films. The renal angiogram is rendered more distinct by compression of the great vessels of the lower abdomen by means of a pressure pad and belt which can be tightened immediately before the final injection is made.

An additional refinement in technique has been reported by my associate, Doctor Poutasse,[1] which may be applicable to some patients with extremely elevated blood pressure. In such cases the contrast medium may be swept away so rapidly that the renal vessels cannot be adequately filled. In these patients the blood pressure may be reduced by using vasodepressor drugs such as sodium nitroprusside, Apresoline® (Ciba), or intravenous Arfonad® (Hoffmann-La Roche), immediately before the aortogram is made. More satisfactory renal angiograms may be obtained in this manner.

The urologist may be called upon to render assistance in the diagnosis of hypertension due to pheochromocytoma. In our clinic preliminary tests by means of adrenolytic and provocative agents are carried out in the medical section. The former consists of the intravenous injection of Regitine,® and a fall in blood pressure of more than 35 mm. systolic and 20 mm. diastolic is generally considered significant. For the provocative test, histamine is injected intravenously and a positive test shows at least a 55 mm. systolic and 35 mm. diastolic rise above the base-line blood pressure previously established. This test has certain dangers and should *never be employed if there is hypertension present.*

If these tests as well as the clinical picture indicate strongly the probability of a pheochromocytoma, we are still left with the problem of locating the tumor. Downward displacement of the kidney on the urogram may be an indication, especially if there is a soft-tissue mass above the kidney. A planigram may reveal the outline of a tumor. In most cases, however, air contrast studies should be carried out. We have preferred presacral oxygen insufflation which gives bilateral visualization and in one case a proved bilateral pheochromocytoma was correctly identified in this manner. Air contrast study is not "foolproof" and false-positive shadows may be found.

Clinical Considerations

Many unilateral renal diseases appear to be capable of causing hypertension. Of the infections, we have seen it with tuberculosis as well as pyogenic infections with or without calculi. Chronic pyelonephritis often is associated with hypertension, especially with the contracted type of kidney. Hydronephrosis in our experience rarely is the cause of an elevated pressure although we have recently seen an example in a child in which the hydronephrosis was associated with recurring urinary infection. Likewise, we think of hypertension as not being associated with renal tumors, although such cases are reported.

Congenital anomalies of the kidney may be associated with elevated blood pressure. Polycystic disease of the kidneys will occur with hypertension in 60 to 75 per cent of cases. Here, because it is a bilateral disease, there is of course no opportunity for surgical correction. The congenital hypoplastic kidney has in my experience rarely been the cause of hypertension although we have an example of a hypoplastic pelvic kidney in a young woman, the removal of which resulted in a return of an elevated blood pressure to normal levels. Some years ago in doing routine urologic examinations on young persons, we found 7 per cent of hypertensive patients had duplex kidney. This may not be significant although it excites some curiosity as to why this anomaly should have such a high incidence in a group of young hypertensive patients.

Although experimental hypertension has been produced by ureteral obstruction, we have not

found this of clinical significance. It is not uncommon to see patients with mild hypertension associated with benign prostatic hypertrophy, many of whom will return to normal following prostatic surgery. In my experience, however, hypertension has not been a major problem in these patients.

The experimental hypertension of Page produced by wrapping the kidney in cellophane has its clinical counterpart. We have reported[2] a typical case in a young man who, following a kidney injury in playing football, developed a calcified and fibrotic perirenal hematoma. Hypertension developed within a year, which returned to normal following a nephrectomy. We have recently seen an exactly similar case in a sixteen-year-old boy. He too had suffered a football injury but there was no history of hematuria. Hypertension later developed and a pyelogram showed a displaced and atypical right kidney. Subcapsular hematoma was suspected and proved at operation. Following a nephrectomy, the blood pressure promptly returned to normal.

Hypertension apparently due to the same mechanism has been reported following operations on the kidney. Considering the large number of kidney operations, this must be a rare occurrence but should be immediately considered in any patient who develops sudden hypertension postoperatively.

One of the most important causes of renal hypertension to attract recent attention is obstructive disease of the renal artery. This may produce sudden and severe hypertension which often is of the malignant type.[3] The obstruction is most commonly intrinsic and may be unilateral or bilateral. It may be due to thrombosis, emboli, arteriosclerotic plaques, fibrous intimal proliferation or even foreign bodies in the renal artery. Compression of the renal artery from extrinsic causes, such as retroperitoneal tumors, renal ptosis, may produce hypertension but these must be very rare.

The first clue to a diagnosis of obstructive arterial diseases is a history of sudden and rapid onset of hypertension which often is of the malignant type. An added clue is a history of flank pain, often with microscopic hematuria or pyuria, which may signify a renal infarct.

One should be especially on guard in young patients who develop sudden hypertension. We have seen one boy, fourteen years of age, with extremely advanced and severe malignant hypertension, who at autopsy showed bilateral pinpoint stenosis of the orifices of both renal arteries. Hypertension, however, may develop with occlusion of only one renal artery.

The diagnosis in these cases is not always easy. As indicated, the history usually furnishes the first clue. Urinalysis may reveal proteinuria, red cells, and pyuria. An intravenous urogram should be done in all such cases. This may show diminished function on one side, but we have a striking example of an apparently normal urogram in a young man with an occluded renal artery. One should note especially the renal mass. In our cases, review of the urogram in each instance has shown evidence of reduction of the renal mass on the affected side.

Final evidence is supplied by a renal angiogram accomplished by means of a translumbar aortogram. In this manner one may be able to demonstrate clearly an obstruction in the renal artery or one of its branches. In our experience, this has proved to be a most important indication for lumbar aortography, and we believe it should be done in all cases of malignant hypertension especially in young patients.

When an obstructive renal artery is demonstrated, differential renal function studies may be carried out for confirmatory evidence, and nephrectomy is indicated if the presence of renal arterial occlusion can be established. Here then is a reversible form of malignant hypertension which reminds us of the importance of identifying these cases, for the reward is great.

Of the adrenal tumors the most important one is the pheochromocytoma. This is a tumor composed of chromaffin cells characteristic of the adrenal medulla. These tumors vary greatly in size and may occur anywhere that chromaffin is found, usually along the aorta. They have been reported twice as frequently on the right side, and 10 per cent are bilateral. They produce two pressor substances, epinephrine and norepinephrine, which cause the hypertension; in pheochromocytoma, the norepinephrine may predominate.

The clinical features of these tumors are quite variable. There may be paroxysmal bouts of hypertension which is associated with nervousness, anxiety, headache, tremor, palpitation, and sweating. In many cases the hypertension is sustained. Hypermetabolism, glycosuria, and hyperglycemia may be present to confuse the diagnosis. It should, however, be suspected when any of these symptoms are present, and the diagnosis pursued by the

measures previously outlined. If the diagnosis can be established, the surgical removal of the tumor will cure the patient.

Adrenal tumors associated with Cushing's disease and primary aldosteronism may also be associated with hypertension. These cases usually come to the urologist after they have had careful study by the internist or the endocrinologist, and the same methods for x-ray study are employed as those described for pheochromocytoma.

Summary and Conclusions

Renal hypertension may be produced by disease which is curable by urologic surgery. Nephrectomy for parenchymal renal disease should be performed only when indicated by the disease present. In these, 25 per cent may be expected to have hypertension relieved by the operation.

Obstructive lesions of the renal artery may produce severe hypertension of the malignant type. It should be suspected in any patient with hypertension of recent onset. Diagnosis can in most instances be clearly established by means of renal angiography and the hypertension relieved by nephrectomy or renal arterial graft or thromboendarterectomy.

The uroloist is also called upon to assist in the diagnosis of adrenal tumors which are associated with hypertension, notably pheochromocytoma, and to carry out the surgical removal of these tumors.

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OBSTRUCTION OF THE GASTROINTESTINAL TRACT

(Continued from Page 1081)

closure of perforations of the cecum. The causes of the perforations of the cecum are not known.

Appendicitis in the newborn is very rare but has been seen and reported, and its associated pathology may and does give rise to obstruction in this age group.

Summary

Obstruction in the gastrointestinal tract in the newborn is in most instances due to a developmental abnormality. The various congenital defects and their locations are briefly reviewed.

The diagnosis in the first twenty-four hours can be made in most every infant if each newborn is carefully examined and observed during the first few hours of life. Examination of vomitus and meconium, with radiograph of chest and abdomen, confirms the obstruction and its location.

Surgery within the first twenty-four hours to relieve the obstructing lesion gives the opportunity for cure.

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The Hypertensive Cardiovascular Diseases— An Evaluation

By Irvine H. Page, M.D.
Cleveland, Ohio

I AM especially pleased to participate in your Annual May Clinic, of which I have heard so much favorable comment outside of Ingham County, and to see some of my old friends, such as Dr. Christian.

Just at this stage of our knowledge of the treatment of arterial hypertension, it seems to me especially useful to gather perspective. This, if only because currently we are being inundated with claims and counterclaims of the merit of this or that new remedy.

It seems somewhat infantile to point out that the function of blood pressure is chiefly to perfuse tissues and that minor variations in its level are most natural in view of the many mechanisms which control it. These mechanisms range from cardiac output to chemical and neural controls of peripheral resistance. This multiplicity of mechanisms incidentally provides a good many doors into which it is possible to get one's foot when it comes to methods of lowering blood pressure. But the more important point is that our chief concern in hypertensive patients is not the height of the blood pressure but rather the way the blood vessels are withstanding the heightened pressure; in short, the rapidity with which cardiovascular disease is developing and progressing. The blood vessels in the eyegrounds, the myocardium and the kidneys provide the most useful vascular areas for its estimation.

Now that we are able to lower the blood pressure satisfactorily in many patients, the problem of vascular disease confronts us. Dr. Corcoran, Dr. Dustan, Dr. Lewis and I have just finished a study of the results of intensive treatment of the last 100 of our patients and arrive at just that conclusion. I stress the primacy of vascular disease because I think we have been slow to recognize, and even slower to investigate, its causes; everyone is too concerned solely with the problem of lowering blood pressure.

There are three main types of vascular disease exhibited by the hypertensive patient. The first and most important, is the proliferative type which occurs chiefly in the arterioles and adds to the increase in peripheral resistance which is the hemodynamic characteristic of hypertensives. The second is ordinary atherosclerosis which affects us all, has been known for 5000 years and has been seriously investigated only in the past ten. The third is the more dramatic variety, especially its name, "malignant." It consists of the deposition of fibrinoid in the vessel wall followed by hemorrhagic necrosis.

Fortunately, there are a number of experimental counterparts of all these types of vascular disease, therefore there is no good excuse for not making a concerted effort to find their mechanisms and cures.

I have said that normal blood pressure is controlled by a wide variety of mechanisms and it has seemed to me that the same is true for the high blood pressures as well. High blood pressure and even so-called essential hypertension, in my view, is not of unitary origin. There seem to be many mechanisms involved. On what is this view based? Let us analyze briefly some of the known ways in which blood pressure can become high. In short, let us try to introduce a little logic into this very murky problem. But, remember, it has been said that "logic" is a rational way of being wrong with complete confidence.

Hypertension can certainly result from involvement of the kidneys. There are several ways of producing it by altering the renal circulation in experimental animals, such as clamping a renal artery or developing a perinephric hull by wrapping the kidneys in cellophane. Bright's disease, pyelonephritis, renal vascular anomalies—all readily come to mind as clinical examples. These have all been beautifully described to you this afternoon by Dr. Engel. Then there are the endocrine varieties, such as result from feeding salt

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Presented at the Twenty-eighth Annual May Clinic of the Ingham County Medical Society, Lansing, Michigan, May 3, 1956.

and injecting DCA, and the clinical examples, aldosteronism and pheochromocytoma. The neurogenic are rather more nebulous in that we have not yet learned how to diagnose them objectively, but I am sure much more common than the endocrine. And finally, the cardiovascular, such as coarctation of the aorta and the systolic hypertension of generalized arteriosclerosis.

I believe that the same system of thinking, in terms of the four groups of mechanisms of secondary hypertension, will be carried over into the analysis of the problem of mechanisms in essential and malignant hypertension. Some day I hope we will be able to estimate individually the contribution of, say the endocrine glands or the nervous system, to the heightened blood pressure. But from this concept comes the important conclusion that all patients with elevated blood pressure will not respond to any single remedy. And it is precisely the opposite type of thinking which is going on today; an attempt to make one drug or one surgical procedure cure all patients with hypertension. No, one of our great problems is to develop methods to measure the mechanisms participating in that elusive and complicated figure called "blood pressure."

Because we don't have all the answers is no reason for not making the attempt at the bedside to get some notion of the participation, normal or abnormal, of the various components, renal, endocrine, nervous and cardiovascular. If you will begin to think in terms of these various groups or panels of mechanisms you will have a much better understanding of these variable and multifaceted diseases, which make up the hypertensive cardiovascular diseases.

The current treatment of hypertension seems to me comparable to that in the management of diabetes in the years 1922 to 1925. The insulin we had then was potent, but it was variable and great care was necessary in its use. Dr. Joslin had pointed the way for the self-care of the patient by his methods of careful patient education. The patients were taught to determine their own urine sugar and adjust the insulin dose accordingly. We are beginning the same thing with hypertensives; they take their own blood pressure and learn to adjust the dose of ganglion blocker to the degree of postural hypotension. In short, to get the most out of the modern treatment of hypertension, infinite pains must be taken. Without this, there is going to be, and is, much disappointment. And this disappointment is greatly heightened by the exaggerated, and in some cases, unprincipled, claims made by a few of the drug houses for their products. When one reads that treatment was effective in 92 per cent and failed in only 8 per cent, or the bald statement that there was good control over blood pressure without toxic manifestations, it makes you wonder. Especially when the physician reads in a clinical evaluation by a good investigator that "good results could not be predicted. Neither did significant lowering of blood pressure ensue in the majority of cases."

Fortunately, most of the claims are now being toned down, at least by the more discerning manufacturers. Let us not forget that just a few years ago rutin was being broadly promoted and some of us who were unconvinced were given a good dose of the absent treatment. The rutin experiment was a costly one for the public's pocketbook.

While on the subject of pocketbook, I want to emphasize again what many of you have heard me say on other occasions—that more consideration must be given by physicians to the cost of drugs. For chronic diseases such as hypertension the price may become prohibitive. When a man has to pay $60 to $90 a month, and even more in some cases, this may be a third of his income. I ask you to acquaint yourselves with prices and ask yourselves whether you wish to prescribe a drug which is millgram for milligram six times as potent but three times as expensive when the drug is to be given by mouth anyway. In short, you are buying a smaller pill at three times the price. I think I could swallow a little larger pill rather more easily if it were that much cheaper. The same type of thinking applies to the digitalis alkaloids. A standardized powdered leaf for most purposes still fulfills the majority of needs and is far cheaper than the purified alkaloids.

I shall not discuss individual drugs because of lack of space but rather content myself with one other general principle I think important in the management of hypertensive patients. This is the avoidance of the substitution of pills for an ordered and humane philosophy of treatment. Then there is another side of the problem which I think deserves your thoughtful consideration. It is so much easier to prescribe a medicine than to take the time to sit down with a patient and explain to him what his disease is, what he must do and what he can expect. This is time and

emotion consuming but I know of no substitute for it. I have tried to make it slightly less so by putting down in a little manual for hypertensive patients many of the things they should understand, and Charles C Thomas in Springfield has just published a new edition of this manual. The education of the patient with chronic disease seems to me of paramount importance.

To put it bluntly, we have somwhat unwittingly substituted a series of "don't and can'ts" for a more positive approach to life in which the "do's and can's" are emphasized. Think of the dismal outlook of the patient first told he has hypertension. The next morning he wakes up to the realization that he must immediately go on a reducing diet, low in fat and free of salt. There is nothing like a bowl of unsalted rice with some nice blue skimmed milk to provide a tempting breakfast on a cold winter morning, let me assure you. And then, of course, he must give up smoking, and presumably drinking. And he must never move at a pace beyond a slow walk. Sex is taboo. To make life utterly miserable, we administer drugs which have the charming property of making it impossible to read, and a little too much of it stops the bowels and ability to urinate. Further, the patient feels dizzy and will often faint if he tries to stand up. I am, perhaps overemphasizing for the purpose of calling your attention to the lack of humanity our enthusiasm for lowering blood pressure may draw us into. Let us more thoughtfully fit the treatment to the needs and those needs must include first and foremost the right to live reasonably effectively and comfortably. Let us apply our new won knowledge scientifically and thoughtfully but always with abundance of humanity. If we are to be our brother's keeper, let's keep him in a style which has some semblance to the one to which we ourselves have become accustomed.

I hope I haven't given you the impression that I am highly critical of the work being done in the treatment of hypertension. Quite to the contrary, I am convinced that enormous strides have been made and today there are far more good and important problems urgently in need of solution than there are investigators to solve them. That is healthy. There are now a number of very useful drugs which, if used with discernment, will prolong the lives of hypertensives. It is just that they aren't good enough and we still don't know how to select the patient in whom the response will always be good. Let us not get smug and self-satisfied and let us anticipate our problems. The most urgent of these, in my opinion, is the cardiovascular disease associated with hypertension. A good job has been done by the research workers, but as my baseball cousin, Satchel Paige once pointed out, "Don't look back. Something may be gaining on you."

INGHAM COUNTY MEDICAL SOCIETY MAY CLINIC

(Continued from Page 1073)

to Michigan such individuals as the now immortal George Crile, Chevalier L. Jackson, Sr., Miles Porter, John Phillips, and Warren T. Vaughan. The Society is also honored in that among the speakers have been Harrison Shoulders, Walter Martin, and Elmer Hess, all past presidents of the American Medical Association.

The quality of the speakers at the clinics and the suitability of the programs presented may be best attested by the record. The attendance at the first clinic was 227. In spite of an increasing number of sectional, regional and local meetings at this particular time of the year, the attendance has increased steadily from year to year. A review of registrations in the early clinics shows that practitioners came from as far east as Port Huron, as far west as Muskegon and Holland, and as far north as Grayling and Gaylord. The geographic pattern of attendance has not changed through the years. The Ingham County Medical Society notes with pleasure that physicians return year after year for the clinic, and takes great pride in its contribuiton to postgraduate medical education.

What's New and Usable in the Chemical Treatment of Abnormal Behavior

By John T. Ferguson, M.D.
Traverse City, Michigan

MY WORK is treating the mentally ill. Not the new admissions at our Traverse City State Hospital, but the chronic regressed patients who, according to all statistics, were beyond the point of no return. It is from our work with these patients that we have collected a large part of the material to be presented today.

What can this mean to you whose field is general practice? Just this: The new methods of chemically reversing advanced, apparently irreversible mental illness are also applicable to the behavior problems you doctors meet in your daily work.

Patients do not arrive at our hospital with fancy psychiatric diagnoses any more than they arrive that way to you family physicians. They all come to all of you and to me for exactly the same reasons—either they cannot live with themselves or they cannot live with others in their communities. But you say these reasons are too vague. What is it, specifically, that brings the mentally ill to the general practitioner—and then to us at the State Hospital?

The simple answer comes out of a study of many complaints leading to admission. It boils down to *behavior*. Behavior of such an abnormal caliber that those closest and dearest to the sick, could not endure it any longer.

All of you are familiar with abnormal behavior of this type—it has existed thousands of years before its description in the learned nomenclature of Bleuler and Sigmund Freud. Many of you have prayed for help that would same day prevent you from having to make another committing statement.

The possible chemical control of abnormal behavior by methods that can be used by the general practitioner—that is our goal. The recent development of what may be called "behavior drugs" gives promise of treatment that will attack and eliminate many of these socio-medical problems in each community. This work has now progressed to a point where it can be passed on for test in the field—by you family doctors.

Our research has progressed until today most of our efforts are concentrated on the investigation and evaluation of new behavior drugs. And, I do mean new, as many of the compounds we are investigating today are numbered, rather than named, and although it may seem odd, many of them are as yet completely unknown to the *Ladies Home Journal* and *Time Magazine*.

This type of research is usually called clinical investigation. However, most of us like to consider ourselves as Medical Test Pilots—the men behind the scene who help to iron the bugs out of the new drugs for the physicians in the front lines. Doing this is not always easy, and the results are not always as successful as we anticipate. It is not easy because after the new drugs have gone through the laboratory and have been tested thoroughly we must analyze the reports, checking closely for activity, safety, side reactions and toxicity. We do this until we find one that has possibilities in our field. Further laboratory tests are then run against known compounds of like action. If the results of this comparative study reveals activity that is better or more specific than those compounds already being used, we file a Food and Drug Administration investigators form and start testing the drug clinically. As part of our research we work out activity and dosage. Far more important for you Doctors, to my way of thinking, are our observations and evaluations of the safety, side reactions, contra-indications and limitations of each compound based upon many months of their use.

As our work progresses, we make reports of that which we have seen. We do this as honestly and simply as we can, in order that the greatest number possible, will understand our methods, see how we obtained our results and be able to administer the new drugs with understanding and confidence.

We have prepared such a report for you today, a report that we feel will shed some new

Presented at the Michigan Clinical Institute, Detroit, March 9, 1956.

light on everyday behavior problems, as well as help you in managing them.

None of the present drugs by themselves will control all behavior problems because each drug is rather specific for one type of behavior, and the behavior of an individual is usually a mixture of overactivity and underactivity. This is true of normal as well as abnormal behavior. None of us carries a full head of steam all the time, just as none of us has a dobber down all the time. However, most of us are able to control ourselves and, as a result of this, can live with the stresses and strains that confront us each day.

It is when the response of an individual to the pressures of life is such that he cannot control himself—it is then that we have abnormal behavior. The abnormality may be covered up well, or it may be severe enough to disturb the relatives and neighbors.

I cannot give a one, two, three plan for diagnosing treatable behavior. But I can say that each of you is doing it every day. Take the patient who comes into your office with or without specific objective pathological signs—before you talk to her two minutes you have mentally recorded the fact that she is tense and nervous or that she has the "blues" and is down-in-the-dumps. It is the same method whether the patient be eight or eighty. With but few exceptions, however, the behavior of the patient is mixed in character.

That is, in most patients, regardless of the outward behavior manifestation, there is an element of the opposite present. Let me repeat—*in most patients, regardless of the outward behavior manifestation, there is an element of the opposite behavior present.* I have stressed this mixture of behavior within each patient because a simple understanding of it will greatly increase your success with the new drugs and eliminate many of the difficulties you are now encountering.

To better understand what I mean, and to show you how we worked it out let's go back a couple of years. The first of the new behavior drugs we had were Serpasil and Thorazine—tranquilizers; quieters. Within a few months, the lay magazines were loaded with articles of praise for which they could not coin enough superlatives. I recall one that went so far as to spread a headline across two pages, "Mental Cure Found," or words to that effect. The pressure was great. Medical publications followed the trend with articles of the same caliber. Enthusiasm had no bounds. Let me refresh wour memory by quoting from an article:

> "Patients showing marked habit deterioration such as soiling, wetting, and destructiveness, become more cleanly, less destructive, and better able to care for themselves; and patients given to outbreaks of violence, with a tendency to assault, become much better adjusted to their environment and their activities are more easily directed into useful channels following treatment."

Fine—except that which I have just read was taken from a 1926 issue of the *American Journal of Psychiatry* and is talking about bromides.

Like the bromides, it was only natural that history should repeat itself. Reserpine and chlorpromazine were soon used to treat everything from falling hair to falling arches. As their use increased, so did the failures and side-reactions. A sour note appeared to overshadow the glowing praise that had heralded these drugs into existence.

When we discounted the failures associated with indiscriminate use, the percentages came up fast but there was still a fly-in-the-ointment. We went fly hunting! With the treatment of our first very overactive group, the results had been excellent, so we treated a less active group. Not so good. They didn't smooth down as well as the first group. The next stratum of the overactive group was even worse. Why? We didn't know, but we looked and checked and then did some thinking. The last group hadn't done as well because they showed more underactive features quicker than the others. It was the same for the second group when compared to the first. From our experience with barbiturates, we knew that an analeptic would act as a pick-up. We tried it with caffeine. Only mild success—but we had a lead. Behavior must be mixed. If true—and we could balance these two behavior components within an individual—it is then that we would have our goal—active tranquility. We tried every analeptic we could find. The results were fair, but none was consistent. It was then, well over a year ago, that Ciba permitted us to try two new analeptics. One was good, the other looked most promising. As often happens in our type of research, the first one went sour. But the other one, methylphenidylacetate, which is marketed as Ritalin, more than fulfilled our fondest expectations. It not only relieved the side-recations of Thorazine and Serpasil—it also



Fig. 1.



Fig. 2.

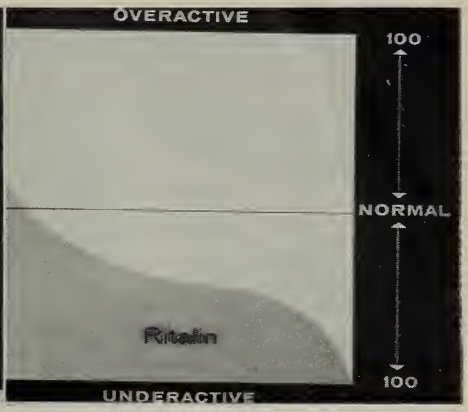


Fig. 3.

increased our improved percentages by creating an awakening toward reality within these patients. It was more than a "picker-upper," it was a true psycho-analeptic.

Realizing this, we lost little time in trying Ritalin by itself on the negative, underactive behavior group. We had excellent results with our first negative group. Ritalin relieved most of their underactive behavior smoothly and without the blood pressure, pulse and appetite changes or the jitters associated with many of the other analeptics we had tried. Then, as with the overactive behavior series, we saw our results fall off as each successive stratum of underactivity was treated. When we add Serpasil and saw our improved percentages increase—it was then that we felt we could produce active tranquility. We hadn't been down the road before, so we traveled cautiously changing doses, watching and recording. As the days turned to weeks, all went well but the months ruined us. Something mysterious was happening to our patients, just as many of you have seen it happen to yours. They just plain weren't doing so well.

Today, fifteen months, 700 patients and eleven drugs later, we feel we have found some of the answers that will help you in the chemical management of behavior problems.

Each of the new behavior drugs has, like digitalis and insulin, specific indications and contraindications. To use them successfully one must know their limitations, their good and their bad points and their clinical course.

The literature, loaded as it is with ambiguous and contradicting statements, makes a true study of each drug impossible. What then are you to do? Concentrate on one analeptic and one tranquilizer. Study them, know them, use them and understand them clinically—separately and combined. They will be enough. Let me show what I mean—

Figure 1 represents behavior problems as they walk through your office door. From the shading, one sees that some are outwardly very overactive, others are quite underactive. Most are near normal.

If only a tranquilizing drug is used, results will be similar to the dark area shown in Figure 2. The most overactive will be helped most. The less the overactivity, the less they will be helped. For a tranquilizing drug, I use Serpasil, because I consider it the least toxic and the safest to use for increased motor activity, aggressiveness, anxiety and tension. It has proven best for me with all overactivity, both mental and physical.

If treatment is confined to an analeptic, results will be similar to the shaded area shown in Figure 3. The more underactivity present, the better are the chances for helping the patient.

For an analeptic drug, I use Ritalin, because within therapeutic limits I have found it to be without side effects. It has proven safest and best for me with underactivity, both mental and physical.

Let's go a step further and consider treatment for both overactive and underactive behavior patients. The overactive patients are treated with Serpasil and the underactive patients with Ritalin. From the clear area in Figure 4, it can be seen that there is still a big segment of behavior that is not being touched.

If you look at this another way, it is then that you see more clearly how this untouched behavior segment has both overactive and underactive components, each of varying intensity. It is definitely mixed (Fig. 5). How do you attack it?



Fig. 4.



Fig. 5.



Fig. 6.

First, you can set up your results as percentages to see how many behavior problems will be responding to Serpasil and how many will be responding to Ritalin, after at least a year. This is quite important because in any practice, the lasting benefits of the future are far more important than are the spectacular cures of today. Roughly, 10 to 15 per cent of all overactive patients on Serpasil alone will be doing fine after a year. About 5 to 10 per cent of underactive behavior problems will be all right on Ritalin alone after a year. We see, then, that at the end of the year 75 per cent of behavior problems have not been touched—or will be showing changes from their first improvements (Fig. 6). The reason for this is not an accumulation of the medicines within the patient. It is an actual change within the patient. Where this change takes place with Serpasil and Ritalin, I do not know, but I do know that as the behavior of an individual moves toward normal, there is need for less and less medicine. Most of you know what I mean because you have used Serpasil for some of your hypertensive patients—patients whose hypertension was perhaps the clinical manifestation of increased anxiety or tension. Within a week or two, the blood pressure was down several points on maybe a dose of 0.1 to 0.3 mgm. of Serpasil three times daily. The patient felt like a new man. Life was more bearable for him. For the first time in years, he was living. You've heard it—and felt good—until months later when the patient came in depressed or complaining of always being sleepy. I have seen it happen on 0.1 mgm. of Serpasil daily. I have also seen this same patient add 10 mgm. of Ritalin twice daily to his daily 0.1 mgm. of Serpasil and improve to a better mental and physical level than at any time in the past ten years. Therefore, to treat behavior problems properly, each must be treated individually as a mixture of overactive and underactive components.

To illustrate what we mean, in Figure 7 we have not only placed the two behavior components side by side, but we have also shaded the areas to show how, as the underactives awaken toward reality and the overactives "simmer down," each will not only need less and less of their original medicine, but to arrive at an active tranquility they will each need to have the second drug added.

Figure 8 is the same as Figure 7, but with the dosages added. In each section we have used a dosage range, rather than a mandatory figure. We did this to stress the individuality of each patient, as two patients with the same clinical behavior pattern quite often require different dosage levels.

Here approximately 15 per cent of the overactive group have no clinically recordable underactive component. This type of patient will require larger doses of Serpasil than any of the others. This dose range is usually 5 to 15 mgm. of Serpasil per day, although it may have to be raised with a few overactive cases. Results with this overactive group will be faster and smoother if the parenteral Serpasil is used.

A safe rule-of-thumb to follow for parenteral Serpasil is this—"If the patient can be given 7.5 grains of Sodium Amytal then 5 mgm. of Serpasil can be given. If not, then use 2.5 mgm. of Serpasil." Either dose may be repeated every three to six hours, if needed. On the underactive side, there are approximately 10 per cent who will require 60 to 90 mgm. of Ritalin a day. This works best when given 20 to 30 mgm. three times daily.

It is from these two groups—the very overactive and the very underactive—that State Hos-

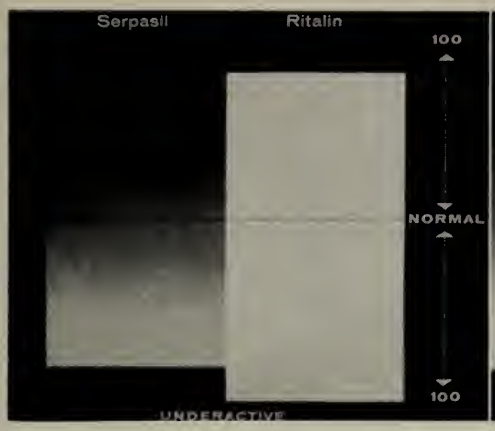


Fig. 7.

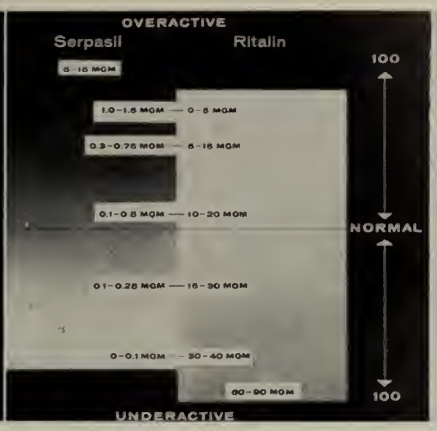


Fig. 8.



Fig. 9.

pitals secure most of their admissions. Proper treatment of this type of patient, therefore, should reduce materially the number of committments each general practitioner will be forced to make in the future. It is a challange to good medicine.

In this central group, very few patients will require as much as 1.5 mgm. of Serpasil or as much as 40 mgm. of Ritalin daily. In fact, the 0.1-0.5 mgm. Serpasil and the 10-20 mgm. Ritalin daily dosage will be used more than any other, as most patients will not be too far from normal behavior when first seen.

Using divided doses will give smoother action. We like a three times daily schedule. The medicine may be given before, after, or with the meals. It may be crushed and put in the food or beverage, if necessary.

Although we show the range for the combined use of both drugs, only a small part of treatment will start that way. In most cases, there will be a dominant behavior. If it is underactivity, start with Ritalin. If it is overactivity, start with Serpasil. Then, as the dominant behavior starts to resolve, add small amounts of the second drug. We have found that early addition of small amounts of the second drug—5 mgm. of Ritalin two or three times daily to the patient on Serpasil, or 0.1 to 0.2 mgm. of Serpasil added to the patient on Ritalin—produced better results and is easier on the patient and the doctor than to do nothing until side reactions or bad effects appear. Learning to add the second drug as soon as the original dominant behavior started to resolve caused us more headaches than any other point, yet the facts behind it are so simple I feel guilty whenever I think about it.

Let us consider Figure 9. Behavior is like a teeter-totter. (1) Normal behavior fluctuates, but maintains balance—even though one component may be dominant.

(2) It is when one factor—overactivity or underactivity is clinically manifested—that we have abnormal behavior. It is the inability of the individual to keep in balance that usually brings him to your attention.

If Serpasil is given in amounts sufficient to decrease the overactivity—is it right that this overactivity should reach normal and stop? Of course not. (3) It is like putting a rock on one end of the teeter-totter to bring it down—and expecting it to stop at center. (4) Unless the dosage is adjusted in proportion to the patient's improvement, it is only right to expect the drug to continue acting on the overactive component until the negative remains clinically.

(5) Now, if we add Ritalin to the point that this new underactivity decreases, we again cannot expect the behavior to reach normal and stop. (6) It will again go on until the original overactivity manifests itself—even though the patient is on the original Serpasil dosage.

(7) From this we see that we could continue adding to each side as they went up and down—we could add until we exceeded therapeutic limits. Remember my headaches—it can be done. I recall one underactive patient during the time I was learning about this—I got her up to 8 mgm. of Serpasil three times daily. That is right—an underactive patient on a dose of 24 mgm. of Serpasil and 90 mgm. of Ritalin each *day*. Today she is doing fine on 0.2 mgm. of Serpasil and 10 mgm. of Ritalin three times daily.

Don't do it the hard way—add the second drug when the patient starts to improve. It will take less drugs—and less time.

(8) After the patient is balanced for a month

or two, decrease both drugs in proportion. (9) That is, if he is on 1 mgm. of Serpasil and 20 mgm. of Ritalin three times daily, cut the dose to 0.75 mgm. of Serpasil and 15 mgm. of Ritalin three times daily. Do this every couple of weeks. (10) In this way, it may be possible to eliminate both drugs. If not, you will arrive at the proper maintenance dose.

The cause of abnormal behavior is not always known to us. Consequently, there will be times when a balanced patient will be temporarily upset. The addition of extra Serpasil or Ritalin for a short time will usually help the patient through these upset periods.

Think of the controlled diabetic patient. If he overeats, he takes more insulin. If he fasts, he cuts his insulin. The same, in relation to the amount of mental strain, is basically true in the treatment of behavior problems. However, the diabetic person cannot do this unless he has had it explained to him. Therefore, for the best results with behavior problems, it behooves the physician to explain to patients, or their relatives, the action of each drug, what the drugs are expected to do and what the patients should report in order that the physician may adjust the drugs properly to reach the desired goal—active tranquility.

Doing this will be easy, and the results will be good with the average behavior problem. However, there is one type of behavior that is being seen more and more each day, which we have been asked to discuss more throughly. It is the behavior of senility, the biggest challenge.

In many cases, it is possible to control, ameliorate or even reverse the abnormal behavior of these elderly patients. The method is the same as that which we have already outlined, but since many consider the abnormal behavior manifestations of senility to be irreversible, we fell a report on this new approach to the problem is needed.

Age, length of illness and the usual physical infirmities of this group are not contra-indications to either Serpasil or Ritalin.

No special diagnostic or laboratory techniques are needed, although we have used them in approximately 300 cases. Clinical observations will be the most important criteria for starting doses as well as adjustment.

Those elderly patients showing a predominance of overactivity should be started on Serpasil. A good starting dose is 0.2 mgm. three times daily.

Those elderly patients showing a predominance of negative behavior should be started on Ritalin. A good starting dose is 10 mgm. of Ritalin three times daily.

The elderly patient about whom you are not sure, or who has mixed behavior, may be started on both Serpasil and Ritalin at the same time. A good starting combination is 0.2 mgm. of Serpasil and 10 mgm. of Ritalin three times daily. It is possible—and with a wide margin of safety—to raise these starting doses if you feel the initial behavior warrants such an increase.

The first change may be within two or three days or it may take as long as three weeks to produce it. Checking the patient every day or two for this period will allow regulation of the dose as needed to produce clinical change.

As the clinical behavior pattern of each patient starts to shift toward normal, either the original dose will have to be reduced or the second drug added.

With overactive elderly patients, a reduction in motor activity or aggressiveness, or anxiety and tension is desirable. When this decrease is seen clinically without any evidence of reduced mental activity—it is then best to reduce the Serpasil gradually before adding Ritalin. If, on the other hand, the reduction includes decreased mental activity—it is then best to add Ritalin. In a few elderly patients, lethargy may be seen before the motor activity or aggressiveness is reduced. When this happens, a small amount of both drugs should be added—the Ritalin to overcome the lethargy and more Serpasil to take care of the motor activity. These cases are rare, but should you have one, remember to work at it with both drugs—or you'll be in for a trip on the bouncing teeter-totter.

The maintenance dose for most overactive elderly patients will be near 0.25 mgm. of Serpasil and 5 mgm. of Ritalin three times daily. About one-fourth of these patients will require either a higher regular dose of Serpasil or an occasional extra dose of Serpasil.

The number of the underactive patients in the senile group will be about one-half or one-thrid that of the number of overactive patients. I can't tell why, but I can say that a negative, withdrawn, quiet patient loaded with tension, anxiety or resistance should be considered overactive and treated as such. Consequently, a fur-

rowed brow, sweaty hands or refusal to follow normal routines when seen in a patient—regardless of the negative front he tries to assume—should be an indication to start on Serpasil and to treat the patient as an overactive person.

It is usually because of the confusion and disorientation in these negative patients that they resist—they don't understand, so they resort to survival tactics—they fight it—they resist it.

Thus, a negative patient is one who is without tension, anxiety, or resistance. He can be confused or disoriented. Usually, he is one who requires help or prodding to follow daily routines. He follows easily, making few if any decisions for himself.

The Ritalin may produce clinical change in these patients within a couple of days. If there is no change within three or four days, the dose should be raised. If, after the dose has been gradually raised to 30 mgm. three times daily and there is no change for three or four days, it is then advisable to add Serpasil which in most cases will produce a change so that the drugs can then be balanced.

The patient who improves his negative clinical pattern without evidence of excess motor activity or aggressiveness, when his behavior moves toward normal, can have the Ritalin gradually reduced. When there is clinical evidence of overactive behavior, along with the mental awakening—it is then that Serpasil should be added to the Ritalin. Most negative patients will be maintained on a dose near 0.2 mgm. of Serpasil and 10 mgm. of Ritalin three times daily. Here again, after the patient has been in balance for a period of time, both drugs can gradually be reduced to find the maintenance dose.

Senile patients will do better and have a smoother life if kept on a maintenance dose. The relatives of these patients usually demonstrate less anxiety if the medicines that helped Grandpa or Grandma are continued.

Speaking of relatives—what can you offer them? What can you tell them the drugs will do for Grandma? You cannot offer them complete rejuvenation for their loved ones. In fact, you can't offer them too much unless they want to help. Why? The drugs by themselves do not have the power to carry the senile patient back—they can produce within the patient the ability to participate—the total improvement will be in almost direct proportion to the help and tender loving care they receive.

If you are sure that the patient will be helped and reassured, and then reassured again as the drugs act to produce a lessening of his confusion and an increase in his orientation—if you are sure—then you can tell those taking care of the patient that he will show a trend toward a more productive, normal activity. There will be an improvement in his ability to co-operate and a new interest in his outlook on life, and himself. He will enjoy himself more, sleep and eat better and take better care of himself. Most important to the relatives—you can tell them he will need less special care and attention—he can be managed without having to be committed to a mental hospital.

How do I know you can say these things? I know because I've seen them happen. Not just once, but many times. Today almost one-half of my committed senile patients could go home, if they had a home to which to go.

I do not know how many of your elderly patients with behavior problems will end up in an institution, but I do know that by early detection and treatment of their abnormal behavior you will reduce the number and make this a much better world in which to grow old.

ONE MD IN FOUR FOREIGN-TRAINED

The doctor shortage in this country is "very critical," says Dr. Dominick F. Maurillo of New York's Board of Regents. This year one foreign-educated doctor will take a licensing examination for every three graduates of the nation's eighty-two medical schools.

American schools graduated less than 7,000 doctors last year, the chairman of the Board of Regents' committee on licensing told the Medical Society of the State of New York, at its 150th annual meeting.

Although these graduates are interning now, the nation's hospitals are still short 7,000 interns. As a result, Dr. Maurillo reports, "some hospital administrators or their representatives travel to Europe and Asiatic countries to invite doctors here for the purpose of interning in their hospitals."

He recommends that a congressional commission study the problem which, he says, stems from "the present policy of limiting the number of students for admission to our medical colleges."

Normal Variants in Pediatric Roentgenology

By William A. Evans, Jr., M.D.
Detroit, Michigan

PEDIATRICS is concerned with the growth and development of the individual and his adjustment to his environment. Many of us are more familiar with the aging process and recognize that a certain pattern of degeneration with variations is the normal fate of the human organism. We recognize that aging is more happily achieved when the degenerative changes of the mind and of the various systems of the body progress in a uniform, parallel fashion in step with the lessening demands of the environment. Disturbances occur when the aging process progresses more rapidly in one system than in another. Degenerative changes which, in themselves, are a normal feature of aging become a basis for disability and disease when out of step with the degeneration of other organs and systems of the body.

Likewise, in the growth of the individual, we recognize a pattern of development of organic structure and function, of appetite and digestion, of capacity and performance, of stress and adaptation, of ambition and resource, and of challenge and response which leads to a harmonious and useful living. Variations in the growth pattern of different organ systems or between the development of systems and the environmental demands placed upon them are often productive of major or minor disturbances which become problems for the pediatrician and the pediatric roentgenologist. Both growth and aging occur by spurts and stops and perhaps with remissions. It also appears that they are in many respects continuing and overlapping processses.

Neonatal Adjustment

The most critical period of development occurs at birth when the individual undertakes the functions necessary for an extra-uterine existence. Most important are complex modifications of the circulation, together with the initiation of respiration and alimentation under the guidance or control of the nervous system. Some of the systems, so to speak, have been functioning in a small way to no particular purpose during later uterine life, but their efficient and effective performance becomes critical in the neonatal period. This is accomplished with varying normal and abnormal degrees of success depending for the most part on the development of the infant and his ability to withstand the trauma of birth. Some degrees of respiratory distress, vomiting and constipation occur with sufficient frequency as to be considered within the normal variations of successful adjustment to extra-uterine life. Here, the radiologist can play a decisive rôle in distinguishing varying degrees of unsatisfactory adjustment from such anatomical abnormalities as malformations of the lung, diaphragmatic hernia, atresias of the alimentary tract, meconium ileus and Hirschsprung's disease which may produce similar symptoms in the neonatal period, but which require quite different methods of treatment.

The Trachea

The shape and form of an organ are determined in part by the form and shape of adjacent organs. For example, if there is agenesis of a kidney, the adrenal gland on that side, if present, assumes a globular shape in contrast with the flattened cap-like shape of the adrenal gland when a normal kidney is present,[1] and we may assume that the kidney plays a dominant rôle in determining the shape of the adrenal gland. In this situation, shape and form would not be expected to have any effect on function. It is a happy characteristic of normal growth that organs develop in harmonious adjustment to adjacent organs.[2] The trachea is an organ which serves no useful purpose in fetal life but at birth is suddenly called upon to perform the vital function of transmitting air to the lungs. For this purpose, it must have an adequate lumen and a wall of sufficient rigidity to maintain its patency under variations of internal and external pressure. Rigidity is maintained by the tracheal cartilages which normally encircle about two-thirds of the trachea. As might be expected, there are variations in the pattern of the tracheal cartilages and in their rigidity. The lumen of the trachea can be easily demonstrated

Read at the Michigan Clinical Institute, Detroit, March 10, 1955.

radiographically and variations in the rigidity of the trachael cartilages and in the collapsibility of the tracheal wall can be visualized by serial exposures made in different phases of respiration. Some degree of collapsibility is a normal feature of the infantile trachea, and this decreases with age.[3] Occasionally, collapsibility may be extreme and as with variations in development of the laryngeal cartilages be productive of disturbances in the respiratory function. The shape of the trachea is determined in part by adjacent structures. The thyroid gland and the aortic arch, for example, are said to make a normal impression on the trachea (Cunningham).[4] Gross[5] has observed impressions of such a magnitude on the trachea by overlying vessels in certain anatomical variations of development of the aortic arch and even by an innominate artery crossing from left to right or a common carotid artery crossing from right to left[6] as to lead to surgical intervention. It seems reasonable to suppose that these impressions are more marked when the trachael wall is more pliable and that they will diminish as the trachael cartilages develop and attain the requisite rigidity. Much has been relearned in recent years concerning the variations in development of the aortic arch but in considering the clinical significance of these variations attention must also be given to the development of such adjacent structures as may be affected.

The Sternum

Sternal retractions are commonly accepted by pediatricians as evidence of respiratory obstruction. The pediatric radiologist observes a wide variation in the extent and pattern of ossification in the infantile sternum and I would assume a corresponding, if not parallel, variation in the rigidity of the sternum and costal cartilages upon which so much of the respiratory effort depends. Thus, it seems to me that while sternal retraction may result from an abnormally great respiratory effort acting on a sternum of normal rigidity, it may also result from a normal or only slightly increased respiratory effort acting on an abnormally flexible sternum.

The Thymus

The thymus is an organ subject to very marked variations in size, shape and weight which, in themselves, do not seem to be of any clinical significance. The large thymus is usually observed in healthy, robust, overnourished infants. It is my conviction that when the thymus has developed in such a manner and when there has not been a corresponding development of the rigidity of the tracheal wall that the lumen of the trachea will be compromised with resulting disturbances in the respiratory function. This situation is encountered in infants usually between two and eight months of age and very seldom in hospital practice. Similar variations in development with disturbances in function occur in the infantile growth of the tongue, palate, mandible, larynx and lymphoid tissue of the nasopharynx. Almost all infants will outgrow these difficulties in time, but there seems to me strong support for this thesis in the relief afforded to mothers, if more than to their infants, by the frequent regression of symptoms following x-ray irradiation of thymic and lymphatic tissue when a proper correlation of symptoms and x-ray signs has been made.

The Skeleton

Such normal variations in skeletal development as infantile periosteal shadows, transverse striations at the ends of the diaphyses, cortical defects and cartilaginous rests,[7] subclinical dysplasia at the hips,[8] infantile bowing of the legs,[9] et cetera, are well known to pediatric radiologists. A wide range of normal in the appearance of ossification centers is appreciated, although the limits of normal are impossible to define with any precision. Perhaps less well recognized is the fact that there is also variation in the pattern or sequence of appearance of these centers and that the skeletal age as indicated by the appearance of centers in one part of the body may differ considerably from such a skeletal age in other parts of the body.

Normal variations are observed in the size and time of closure of the fontanels of the skull. Premature closure of sutures would seem to be an abnormal extension of the normal variation in the growth of the skull. This premature closure becomes of pediatric significance when it limits the growth of the brain or causes serious cosmetic deformity. Recently, more satisfactory surgical corrective measures have been developed for premature closure of the cranial sutures,[10] and it is a function of the pediatric roentgenologist to determine whether a premature closure of sutures is occurring, which sutures are involved, and whether the closure is the cause or the result of a failure in growth of the brain.

For many years, there has been speculation con-

cerning a variety of skeletal disorders in childhood which are now being grouped under the comprehensive classification of the osteochondroses. There is still difference of opinion as to which lesions should be included in this group. At least for the purposes of this discussion, I would include among the osteochondroses Legg-Perthes' disease, infantile coxa vara, slipped femoral epiphysis, acetabular and ischiopubic osteochondroses at the hips, Blount's disease, Osgood-Schlatter's disease, and Sinding-Larsen's disease at the knee, Koehler's disease of the tarsal scaphoid, Sever's apophysitis of the os calcis, and Freiberg's infraction of the metatarsal head in the foot, Calves vertebra plana and Scheuermann's disease in the spine.[11] In my experience, osteochondroses of this type have been extremely rare, if not absent, in the upper extremity with the exception of an osteochondrosis of the proximal epiphysis of the ulna occurring in the pitching arm of adolescent baseball players.

These lesions have in common the occurrence at a restricted period of osseous development in a particular area, a location subject to pressure or traction, a self-limited course, and usually a paucity (or even absence) and insidious onset of symptoms which correlate poorly with the anatomical manifestations of the disorder. In consideration of these anatomical manifestations as demonstrated by x-ray, there has often been doubt as to the dividing line between the normal variation and the abnormal, particularly as might be expected in the milder forms of the disorder.

Trauma is commonly implicated as a factor in these lesions, but it should be understood that this trauma is not trauma in the strict medical-legal sense but the trauma of muscular activity and weight-bearing. It seems to me that the terms avascular or aseptic necrosis are not properly applicable to the osteochondroses of this type because of their self-limited course, the completeness of healing with deformity as the only residual and the integrity of the articular cartilage which is maintained throughout the disease. In Legg-Perthes' disease and in some of the other osteochondroses, Goff[12] and others have observed a delay in the osseous development for the chronological age and in proportion to the muscular development and activity. Certainly, in some of the osteochondroses, a disproportionate development of adipose tissue is a factor. I am inclined to the thesis that these osteochondroses represent a disturbance in growth resulting from a faulty evolutionary adjustment to the upright posture in an individual, whose physiological stresses and strains have at the moment exceeded the support afforded the bone in a critical stage of its growth and development. In other words, the lesion develops either, on the one hand, as the result of excessive weight-bearing or hyperfunction of muscle acting by pressure or traction on normally developing bone or, on the other hand, as the result of these same factors acting in moderate degree on inadequately developing bone.

Here it seems to me a close analogy may be drawn with the aging process. The aging of ligaments and cartilage and concomitant alterations in the bone structure occur in very much the same areas of stress and strain affected by the osteochondroses of the growing child. Again, a sharp distinction between normal aging and pathological aging is difficult and again there is a very poor, if any, correlation of the anatomical manifestations with symptoms in many instances.

Trauma

Something has been said of the varying effects of varying degrees of physiologic trauma during birth and growth. Trauma is at best difficult to measure and evaluate in the infant and young child, and we are aware that what may be physiologic trauma for a healthy infant may be pathologic trauma for an infant with scurvy[13] or osteogenesis imperfecta,[14] for example. I would mention here a variety of trauma to the infant which I think has been widely misunderstood. Caffey, in 1946,[15] called attention to a group of infants with subdural hematoma and multiple fractures of bones. Similar reports have been made by Smith,[16] Lis and Frauenburger,[17] Silverman,[18] Astley,[19] and Marie, et al.,[20] with the general impression that an obscure syndrome of unknown etiology has been established. These infants typically present themselves with soft-tissue swellings and ecchymoses, dysfunction of one or more extremities, signs of intracranial disturbance often with subdural hematoma, and x-ray manifestations particularly in the extremities of periosteal shadows in various stages of organization and a peculiar fragmentation of one or more metaphyseal areas in the long bones. It has been our experience at the Children's Hospital of Michigan with a similar group of cases which has been studied and reported by Dr. Paul V. Woolley[21] that these infants are victims of criminal assault, usually by

parents or guardians who deny any knowledge of the manner by which these infants have been injured. For sociological purposes and for the health and even life of the infant, it is important that this form of trauma be recognized for what it is.

Summary

Variations in growth and development observed in pediatric radiology are discussed with emphasis on those manifestations in the borderland between the normal and the abnormal. Such manifestations occurring in the neonatal period, affecting the respiratory tract, and encountered in the skull and skeleton are considered. Attention is also drawn to some normal and abnormal forms of trauma in infancy and childhood.

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PSYCHOPHYSIOLOGIC GYNECOLOGY

(Continued from Page 1085)

of whom these two factors form the warp and the woof.

Implicit or explicit in the material presented have been the following points.

1. Gynecologic problems can best be diagnosed and treated through the psychophysiologic approach.

2. This approach necessitates constant recollection of the basic principles of psychopathology as well as those of histopathology.

3. Laboratory experiments have begun to clarify the correlation between traumatic emotional events and physiologic change.

4. In psychosomatic conditions it is probable that highly specific personal experiences determine the exact location of pain, abnormal function or tissue change.

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Interpersonal Relations in the Practice of Medicine

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LATE one evening in the summer of 1948, a practicing physician received a telephone call from a young man who said that he and his wife were desperate over the sudden illness of their four-year-old daughter. They were afraid that she might be suffering from poliomyelitis. From the description he gave of the signs of her illness the physician had good reason to think the same. The man then said that they realized the hour was late; that they were strangers to the doctor and that they lived far out in one of the suburbs. Would he come? Without any hesitation the physician told the stranger he would arrive within the hour. After he had examined the child, he made arrangements for her admission to an infectious disease hospital and he remained with the family until the ambulance arrived. Then, and only then, did he go his way.

Why did this physician go to all this trouble on behalf of total strangers, at a late hour, after a long day of busy hospital and office practice? Why did he not tell them that in all probability their child needed immediate hospitalization and that he would make the necessary arrangements for this from his office? He acted as he did because he knew these parents were severely frightened and that they probably had good reason to feel frightened. He knew in advance the probable course he would follow once he had seen their child. But he also knew that by going to them as quickly as possible and remaining with them that they would be greatly relieved of their fright. As a physician, he knew that these parents were suffering from fright, and he regarded it as his responsibility to relieve their suffering. It is only natural that they will always remember him and that they will always be grateful for his understanding.

I have not cited this incident because it may appear to be unusual or in any sense dramatic. I can well imagine that there are many among you who have had similar experiences and that you responded in the same splendid manner. I have cited this episode from the life of one of our colleagues because it illustrates so well the human aspect of medicine which is far more basic in everyday practice than all the truly magnificent progress which our science has achieved, and of which we are the proud possessors. Without this knowledge we would be utterly helpless, but without the humanitarian motivation which led us into becoming physicians we would become impersonal technicians devoid of our fundamental significance. The application of scientific theory and the utilization of scientific techniques for the alleviation of human suffering will always be structured within the foundation of interpersonal relations. The emotions and feelings are older and deeper than the intellect and all intellectual development. We are human beings first and physicians only later, and the more of our humanism we retain through the years of our becoming scientists, the more competent we become as doctors of medicine. The danger of overevaluating the scientific and technological aspects of medicine has been avoided by the modifications in undergraduate medical curricula, which now include instruction regarding the emotional factors in illness and the role of interpersonal relations in the practice of medicine.

There are many patients in the practice of every physician who are as frightened as the parents of the poliomyelitic child. Living in an increasingly insecure world is frightening to many but the fright of the majority is concealed by a myriad of signs and symptoms of illness from which they seek relief and simultaneously struggle against their physicians when they attempt to relieve them. They tend to feel improved, less anxious and less insecure, more through the calm and the patience of their doctors than because of the medicines prescribed for them. Because they are frightened they are extremely sensitive to feelings of doubt, uncertainty or uneasiness on the part of their physicians. Many practitioners of medicine render these patients their best assistance more

Presented at the Michigan Clinical Institute, Detroit, March 11, 1955.

through their calm, firm, quiet and unruffled attitude than through anything they say to them. The emotionally sick may be likened to very young children who remain quiet and feel secure as long as their mothers remain calm and collected. There is much in these relations that belongs to the concept of emotional contagion. The family doctors of fifty years ago were much more aware of this principle, which is basic in all medical practice and older than medicine itself, than we are today.

It is a mistaken notion that a physician must please his patients, in the sense that he must yield to all their wishes or that he must give them something by way of medicines, so that they will continue in his care. Those who follow this pattern thereby reveal a definite disturbance in their interpersonal relations. They may be brilliant in their own right; their diagnostic acumen may be excellent, but they are handicapped emotionally in their relations with others because they lack confidence in themselves or are afraid of their patients becoming angry with them. There are others whose relations with their patients are not nearly as helpful as they might be because of their authoritarian attitudes and their severity, which make their patients afraid of them.

The quality of a physician's relation with his office nurse or his receptionist is often reflected in her attitude toward his patients. If they complain to him of the way she speaks to them or the manner in which she attends to their requests, the physician will do well to reflect on how he manages his relationship with her. These situations are similar to family situations in which a mother's irritability and lack of consideration for her children are reflections of her dissatisfaction with their father. This is not to say that nurses, or mothers, manage their relations as well as they might. It is only to point out that feelings of resentment are easily displaceable, particularly toward those who are dependent and helpless. Some patients have a more satisfying relation with their doctor's nurse than they do with the doctor himself. They turn to her frequently for advice and even ask her to suggest remedies for some of their complaints. They tell her she understands them better, and in all respects they behave like they did in their childhood when their mother was more available and they were less fearful and felt closer to her than they did to their father. These re-editions of parent-child relations are commonplace in medical practice. They are wholly acceptable to some practitioners, who believe their office nurse can invariably use good judgment and who entrust her with responsibilities which her training has not prepared her to assume. They rationalize that they are too busy to discuss everything with their patients themselves but they are in fact far more dependent upon their nurses than they realize. Because they do not realize it, they are not motivated to alter the situation.

This lack of self-awareness in one's relations with others prevents the possibility of many desirable changes. It is the greatest single obstacle to the rendering of more effective medical care by many physicians. Those who *are* aware of themselves and of what they say to patients, and the effects of their pronouncements on their patients and their families, are invariably recognized as the best physicians in their community. Self-awareness is often painful to one's self-regard but without it one is apt to do and to say many things which may prolong illness or interfere with recovery. The lack of self-awareness in the practice of medicine is the first reason why we cannot see ourselves as others see us, why we unknowingly offend, and unintentionally disregard what others try to tell us.

Every doctor is blamed, criticized or denounced by *some* of his patients or their relatives. Many doctors are accused of being indifferent, of being negligent or of being too interested in their professional fees. Some doctors are threatened, compared unfavorably with their colleagues or railed against because pain or distress persists and improvement does not occur. Regardless of whether complaints and criticisms are based on fact or fancy, every physician receives them. The doctor who reacts to these personal attacks by discharging his own feelings thereby abandons his role as a doctor of medicine and the authority with which he has been endowed. The physician, who, instead of reacting, remains calm and attempts to evaluate the justification or the lack of justification for the patient's criticisms, thereby engages in an effort which may be of value to the patient and to himself. If, in addition, the doctor seeks to discover the irrational basis of the patient's feelings, he may acquire an understanding that may assist him to treat the patient more effectively.

Some persons are impelled to criticize their doctors because they are afraid of their tender and affectionate feelings. Others try to provoke their physicians in order to test their doctor's

devotion. The great majority, however, transfer to their physician some of the hatred and resentment they often experienced toward one or both of their parents in their childhood and which they were never able to express. These irrational elements of the past are revived in all interpersonal relations in adult life. In the practice of medicine they are the source of the power and influence with which people endow their physicians. The relations of sick people to their doctors always re-awaken some of the feelings which they as children had for one of their parents. There is an urgent need for every physician to understand and to recognize the existence of these feelings in his relations with his patients. To ignore them or to attempt to deny that they are present can only give rise to misunderstanding much that takes place in one's relation to those who entrust us with their life or the life of a member of their family. To misunderstand the nature of the feelings which a sick person manifests toward his doctor may result in failure to relieve him of his illness.

It seems pertinent to this discussion to point out that many families are, as we say, closely knit, and it is this strength of feeling which each has for the other that results in all of them becoming deeply affected whenever any one of them become ill. In such instances the care of the patient includes the care of the patient's family, and the quality of the doctor's relations with the family often determines how much or how little he may be able to benefit the patient. The attitudes of many relatives tend to increase or diminish the confidence which patients have in their physicians. During the long treatment of those who suffer with chronic diseases, the influence of a close relative, who takes it upon himself to function as an outpost for the physician, often sustains them through their periods of discouragement. Without the benefit of these relations with the families of patients, the practice of medicine would not only become more difficult but even impossible. Fifty years ago when obstetrical deliveries were accomplished in the homes, husbands were called upon to administer the anesthetic, and today and tomorrow women everywhere function as the physician's nurse-assistants.

If the family of a patient criticize the treatment by the doctor, would it not be wiser to try to understand the reason for their criticism than to try to disregard it? Is any physician entitled to the belief that he is omniscient or that the family *always* know less than he does about the patient? The majority of medical practitioners know the value of seeing their patients through the eyes of the family, and as they listen they often discern how the attitude of a husband or wife, a father or a mother, has contributed to the patient's illness. This knowledge is of value in estimating the prognosis, in planning the treatment and in learning how to work with the relative in behalf of the patient. It is well known and within the experience of every physician that some patients undergo a remarkable improvement during the absence of the family, just as children who are severe feeding problems at home have larger appetites and eat most heartily whenever they have a meal at a neighbor's. There are some persons who unknowingly contribute so much to the illness of someone with whom they are closely associated that the sick one cannot be relieved without both of them receiving treatment.

All of these activities bear witness to the fact that the interpersonal relations between patients, their families and their physicians comprise the keystone of medical practice. This is well known but its significance tends to be overlooked, taken for granted or not sufficiently appreciated. There is always need to have the same confidence and trust in the families of the sick as we have in the sick ones themselves. Those whose thinking and judgment are not distorted by suffering are the ones upon whom we can depend for the more reliable information. Many a history obtained from a patient is inaccurate or inadequate and can only be corrected or completed by a member of the family.

If we are to achieve and maintain good interpersonal relations in the practice of medicine, we need to have as much interest and concern for the feelings of our patients and their families as we have in the physical aspects of their illnesses. We need to regard our relations with each of them as significant as our scientific knowledge and the medicines we prescribe. And finally, we need to maintain a constant awareness of our own feelings in our daily efforts in behalf of the sick.

Arabian Medicine in the Post-Koranic Period

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THE primitive medical concepts manifested throughout the pages of the Koran[1] are surely no gauge of the secular medical knowledge which developed among the Arabian peoples during the Middle Ages. Ninth century records indicate that higher standards of universal knowledge existed among these Arabians than among any other contemporary people and that there were Arabian physicians who were not only trained in Greek and especially Galenic medicine but also in philosophy, mathematics, astronomy, law and theology. A mass of erudition was conveyed orally by *rawies* (reciters) from generation to generation. There were medical schools in Mesopotamia, Bagdad and Persia which taught systems based upon the plan of the Alexandrian schools.[2]

Arabic medicine is an outgrowth of the Arabic world outside of Arabia. It owed neither seed nor soil to the Arabian peninsula. It was written in the Arabic language which the physicians of the age employed regardless of their nationality. The seed of the new learning was the legacy of Hellenism. The soil was Syria, where the Greek civilization was still in existence, and Persia, where the University of Jondisabur flourished. Yet the stimulus that quickened the intellectual life and induced the first vigorous growth of scholarly advance came from the religion of the Arabs.

Of course, there were in Arabia, as elsewhere, medical healers who disregarded medical standards and resorted to magic and similar deceptions. According to no less an authority than Rhazes, there were many doctors who employed a great deal of trickery in their practice. Many customarily hired confederates who claimed to be patients and spread the good word that their employer had wrought miraculous recoveries on them.[3]

The status of Arabian medicine in the early medieval period may best be derived by perusing the secular literature that developed after the completion of the Koran. One of the most celebrated of these texts is the "Arabian Nights," termed in Arabic, *"Alf-Lailat wa Laila"*—"The One Thousand and One Nights." This Arabic work includes material taken from the Indian and Persian languages reinforced with many Arabic elements. Some of these stories go back to the period of the Koran. The entire work, in its present form, seems to have been collected into one large corpus in about the thirteenth century A.D.[4]

Abu al Husn

The story which throws light upon the medicine of that period goes back to the reign of Caliph Harun al Rashid (786-802) at the end of the eighth century. It deals with one named Abu al Husn ("Father of Beauty"), an heir who squandered all his wealth recklessly and was left with one beautiful slave girl named Tawaddud who possessed an extraordinary amount of intellect and varied learning.

This slave girl realized her master's plight and urged him to sell her to the Caliph Harun al Rashid in order to raise sufficient money to get him out of his financial difficulties. The Caliph was much impressed with her beauty, but before he consented to purchase her for the stipulated price, he wanted to be convinced of the magnitude of her scholarship. He therefore summoned specialists in all branches of science to test the extent of her knowledge. These scholars put her through severe examinations in law, theology, philosophy, astronomy, astrology, music, chess playing, and medicine. The answers given by the slave girl Tawaddud to her medical examiners furnish a fair idea not only of the sources and aspects of the Arabian medicine of that period but also of the current knowledge of Galenic as

1. Gordon, B. L.: Medicine in the Koran. Journal of the Medical Society of New Jersey, Vol. 52, no. 10, pp. 513-518 (Oct.) 1955.
2. Baas, J. H. Outline of the History of Medicine. English translation by Henderson, H. E., New York, 1889, p. 220.
3. Neuberger, M.: History of Medicine. English translation, Oxford University Press. Henry Frowde, 1910, vol. 1, p. 363.
4. The most complete English translation is that of Sir Richard Burton in twenty-five volumes which contains more than 200 stories, many of which include other stories making a total of almost 400 stories. The present writer has availed himself of the use of the Macmillan Company edition, New York (especially vol. 5, pp. 218-227).

well as Talmudic medicine.[5] Her replies to the queries are of great medical interest.

After she was questioned by the Islamic theologian and came out victorious, there "came forward the skilled physician and said to her, 'We are free of theology and now to physiology. Tell me, therefore, how is man made? How many veins, bones and vertebrae are there in his body? Which is the first and chief vein and why was Adam named Adam?' "[6]

She replied, "Adam was called Adam, because of his *udmah,* that is, the wheaten colour of his complexion and also (it is said) because he was created of the *adim* (the earth).[7] . . . There were created for him seven doors in his head, viz., the eyes, the ears, the nostrils and the mouth, and two passages, before and behind. The eyes were made the seat of the sight-sense, the mouth the seat of the taste-sense and the tongue to utter what is in the heart of man."[8]

After describing the biblical story of the composition of man she proceeds to the chemical and physical basis of the structure of man.[9] She then continues with the humoral physiology of Hippocrates and finally discusses the mechanism of man.

According to Tawaddud, Adam was made of a compound of the four elements: water, earth, fire and air. The yellow bile is the humour of fire, being hot-dry; the black bile that of earth, being cold-dry; the phlegm that of water, being cold-moist, and the blood that of air, being hot-moist. There were made in man 360 veins[10] and 249 bones.[11]

There are three souls or spirits: the animal, the rational and the natural, to each of which is allotted its proper function. This is the Platonic idea of the division of the soul into three parts.

Tawaddud then goes on to speak of the wisdom of the Creator in the formation of each and every organ of the body. Here she gives voice to Galen's concept of teleology:

"Moreover, Allah made him (i.e., Adam) a heart and spleen and lungs and six intestines[12] and a liver and two kidneys and buttocks and brain and bones and skin and five senses: hearing, seeing, smell, taste, touch. The heart He set on the left side of the breast and made the stomach the guide and governor thereof. He appointed the lungs for a fan to the heart[13] and established the liver on the right side, opposite thereto. Moreover, He made, besides these, the diaphragm and the viscera and set up the bones of the breast and latticed them with the ribs."

Tawaddud is next interrogated as to how many ventricles are contained in a man's head.[14] She replies, "Three which contain five faculties, styled the intrinsic senses, to wit: common sense, imagination, the thinking faculty, perception and memory."[15]

Anatomy

The following is the slave girl's description of the osteology of the human body which is most remarkable for its time, for it includes some additions to Galenic anatomy:

"Man's frame consists of 240 bones,[16] which are divided into three parts: the head, the trunk and the extremities. The head is divided into calvarium and face. The skull is constructed of eight bones, and to it are attached the four osselets of the ear. The face is furnished with an upper jaw of eleven bones and a lower jaw of one; and to these are added the teeth: two and thirty in number, and the os hyoides (the fork bone: Arabic *al-lami*). The trunk is divided into spinal column, breast and basin. The spinal column is made up of four and twenty bones, called *fikar* or vertebrae; the breast, of the breast bone and the ribs, which are four and twenty in number, twelve on each side; and the basin of the hips, the sacrum (or "holy bone")[17] and the os coccygis. The extremities are divided into upper and lower, arms and legs. The arms are again divided firstly into shoulder, comprising shoulder blades and collar bone; secondly into the upper arm which is one bone; thirdly into

5. A number of Talmudic academies flourished at that period in Mesopotamia, namely Nisibis, Nehardea, Pumpeditha and Sura; the last was still in existence at the end of the seventh century.
6. Burton, R.: Arabian Nights; *opus cited*, vol. 5, p. 218.
7. Ibid. p. 218.
8. Ibid. cf. Midrash Tadshei 6.
9. The chemical composition of the four elements was the teaching of the ancient Greeks and was still in vogue at the time of Galen, and for centuries thereafter.
10. Burton, R.: *opus cited;* cf. Targum Jononan ben Uziel: Genesis 3:77.
11. Mishna Oholot 1:8.
12. cf. Genesis Rabba 3, Kahelet Rabba 7.
13. cf. Midrash, Genesis 2:2.
14. cf. Talmud, Berochot 19, Hulin 45.
15. This teaching is entirely modern. It is to be noted that these faculties were believed by all ancients (including the authors of the Holy Scripture and the Koran) to be located in the heart.
16. cf. Mishna Oholot 1:8.
17. It is believed by the orthodox Hebrews that the body will be built from this bone on resurrection day. The bone was known as "lus" or "nut," cf. Leviticus Rabba 18, Kohelet Rabba 12:5.

fore-arm, composed of two bones, the radius and the ulna; and fourthly into the hand, consisting of the wrist, the metacarpus of five, and the fingers, which number five, of three bones each, called the phalanges, except the thumb, which hath but two. The lower extremities are divided, firstly into thigh, which hath one bone; secondly into leg, composed of three bones: the tibia, the fibula and the patella; and thirdly into the foot, divided like the hand, into tarsus, metatarsus and toes; and is composed of seven bones, ranged in two rows, two in one and five in the other; and the metatarsus is composed of five bones and the toes number five, each of three phalanges except the big toe which hath only two."[18]

No description is given of the muscles or ligaments, but the angiology of the human system and the function of the organs are discussed:

"The aorta, from which they (i.e., the blood vessels) ramify, and they are many, none knoweth the tale of them save He who created them; but I repeat, it is said that they number three hundred and sixty. Moreover, Allah hath appointed the tongue as interpreter for the thought, the eyes to serve as lanterns, the nostrils to smell with, and the hands for prehensors. The liver is the seat of pity, the spleen of laughter and the kidneys of craft; the lungs are ventilators, the stomach the storehouse and the heart the prop and pillar of the body. When the heart is sound, the whole body is sound,[19] and when the heart is corrupt, the whole body is corrupt."

The following concerns itself with diagnosis:

"A physician, who is a man of understanding, looketh into the state of the body and is guided by the feel of the hands, according as they be firm or flabby, hot or cool, moist or dry. Internal disorders are also indicated by external symptoms, such as yellowness of the white of the eyes, which denoteth jaundice, and the bending back, which denoteth disease of the lungs." . . . "The science of the diagnosis of disease by internal symptoms is founded upon six canons: (1) the patient's actions; (2) what is evacuated from his body; (3) the nature of the pains; (4) the site thereof; (5) swelling and (6) effluvia given off his person."

Headache is produced "by the ingestion of food upon food, before the first be digested, and by fullness upon fullness; this it is that wasteth peoples. He who would live long, let him be early with the morning-meal and not late with the evening-meal; let him be sparing of commerce with women and wary of such depletory measures as cupping and blood-letting; and let him make of his belly three parts, one for food, one for drink and the third for air; for that a man's intestines are eighteen spans in length and it befitteth that he appoint six for meat, six for drink and six for breath. If he walk, let him go gently; it will be wholesomer for him and better for his body and more in accordance with the saying of the Almighty, 'Walk not proudly on the earth.' "[20]

"The symptoms (of excessive yellow bile) are a sallow complexion and a bitter taste in the mouth with dryness; failure of the appetite, venereal and other, and rapid pulse; and the patient hath to fear high fever and delirium and eruptions and jaundice and tumour and ulcers of the bowels and excessive thirst."

Excessive black bile gives rise to "false appetite and great mental disquiet . . . and it behooveth that it be evacuated, else it will generate melancholia and leprosy and cancer and disease of the spleen and ulceration of the bowels."

The art of medicine is divided into two parts: the art of diagnosing diseases and that of restoring the diseased body to health.

The drinking of medicine is most efficacious "when the sap runs in the wood and the grape thickens in the cluster and the two suspicious planets, Jupiter and Venus, are in the ascendant; then setteth in the proper season for drinking of drugs and doing away of disease."

Diet

The query is asked: "What time is it, when, if a man drink water from a new vessel, the drink is sweeter and lighter or more digestible to him than at another time, and there ascendeth to him a pleasant fragrance and a penetrating?"

The answer is given:

"When he waiteth awhile after eating, as quoth the poet:

'Drink not upon thy food in haste but wait awhile;
Else thou with halter shalt thy frame to sickness lead:
And patient bear a little thirst from food, then drink;
And thus, O brother, haply thou shalt wine thy need.' "[21]

18. cf. Mishna Oholot 1:8.
19. Jerusalem Talmud 8:4.
20. Koran 7:39.
21. Educated Arabs can quote many a verse bearing upon domestic medicine and reminding us of the lines bequeathed to Europe by the School of Salerno.

To prevent disease, the best food is "that which is not eaten but after hunger, and when it is eaten, the ribs are not filled with it, even as saith Galen the physician, 'Whoso will take in food, let him go slowly and he shall not go wrongly.' . . . 'The stomach is the house of disease, and diet is the head of healing; for the origin of all sickness is indigestion, that is to say, corruption of the meat in the stomach.' "

Concerning the *hammam* (bath), "Let not the full man enter it. Quoth the Prophet, 'The bath is the blessing of the house, for that it cleanseth the body and calleth to mind the Fire.' " The best baths are "those whose waters are sweet and whose space is ample and which are kept well aired; their atmosphere representing the four seasons—autumn and summer and winter and spring."[22]

The best food is "that which women make and which hath not cost overmuch trouble and which is readily digested. The most excellent of food is *brewis*[23] (bread sopped in broth). According to the saying of the Prophet, '*Brewis* excelleth other food, even as Ayishah excelleth other women.' " According to the Prophet, meat "is the delight of this world and the next world." Fruits should be eaten only when ripe and not out of season. Endive is the healthiest vegetable.

"Drink it (water) not in large quantities nor swallow it by gulps, or it will give thee headache and cause diverse kinds of harm; neither drink it immediately after leaving the *hammam* (bath) nor after carnal copulation or eating (except it be after the lapse of fifteen minutes for a young man and forty for an old man), nor after waking from sleep."

Concerning alcoholic beverages, "Doth not the prohibition suffice thee in the Book of almighty Allah, where He saith, 'Verily wine and lots and images, and the divining arrows are an abomination, of Satan's work; therefore avoid them, that ye may prosper.' And again, 'They will ask thee concerning wine and lots: Answer, In both there is great sin and also some things of use unto men but their sinfulness is greater than their use.'[24] As for the advantages that be therein, it disperseth stone and gravel from the kidneys and strengtheneth the viscera and banisheth care, and moveth to generosity and preserveth health and digestion; it conserveth the body, expelleth disease from the joints, purifieth the frame of corrupt humours, engendereth cheerfulness, gladdeneth the heart of man and keepeth up the natural heat: it contracteth the bladder, enforceth the liver and removeth obstructions, reddeneth the cheeks, cleareth away maggots from the brain and deferreth grey hairs. In short, had not Allah (to whom be honour and glory!) forbidden it,[25] there is not on the face of the earth aught fit to stand in its stead. As for gambling by lots, it is a game of hazard such as diceing not of skill."

The best wine is "that which is pressed from white grapes and kept eighty days or more after fermentation: it resembleth not water and indeed there is nothing on the surface of the earth like unto it."

Cupping

Cupping "is for him who is over full of blood and who hath no defect therein: and whoso would be cupped, let it be during the wane of the moon, on a day without cloud, wind or rain and on the seventeenth of the month. If it fall on a Tuesday, it will be the more efficacious, and nothing is more salutary for the brain and eyes and for clearing the intellect than cupping. One should be cupped 'on the spittle,' that is, in the morning before eating, for this fortifieth the wit and the memory. It is reported of the Prophet that, when anyone complained to him of a pain in the head or legs, he would bid him be cupped and, after cupping, not to eat salt food after fasting, for it engendereth scurvy; neither eat sour things as curdled milk immediately after cupping."

Cupping should be avoided "on Sabbaths or Saturdays and Wednesdays, and let him who is cupped on those days blame none but himself. Moreover, one should not be cupped in very hot weather nor in very cold weather: and the best season for cupping is springtide."[26]

22. Personal cleanliness was a feature of the Arab world as the lack of it was characteristic of contemporary Europe. The scrupulous cleansing doubtless arose from the frequent ablution required by Moslem prayer and other rules of life.

23. Crumbled bread and hashed meat in broth; or bread, milk and meat. The Saridah of Ghassan, cooked with eggs and marrow, was held to be a dainty dish: hence, the Prophet's dictum.

24. Koran 2:216.

25. Liberal Moslems observe that the Koranic prohibition is not absolute and there is no threat of Hell for infraction. Yet Mohammed doubtless forbade all strong alcoholic beverages and the occasion of his so doing is well known (Pilgrimage 2:322).

26. Many of these regulations are found in Talmudic literature.

Copulation

Concerning sexual intercourse,[27] "Copulation hath in it many and exceeding virtues and praiseworthy qualities, amongst which are, that it lighteneth a body full of black bile and calmeth the heat of love and induceth affection and dilateth the heart and dispelleth the sadness of solitude; and the excess of it is more harmful in summer and autumn than in spring and winter." Sexual relations are best, "if by night, after food is digested and, if by day, after the morning meal. It banisheth trouble and disquiet, calmeth love and wrath and is good for ulcers, especially in a cold and dry humour; on the other hand excess of it weakeneth the sight and engendereth pains in the legs and head and back: and beware, beware of carnal connection with old women, for they are deadly. Quoth the Imam Ali, 'Four things kill and ruin the body: entering the *hammam* (bath) on a full stomach; eating salt food; copulation on a plethora of blood and lying with an ailing woman; for she will weaken thy strength and infect thy frame with sickness; and an old woman is deadly poison.'[28] And quoth one (sage) 'Beware of taking an old woman to wife, though she be richer in hoards than Karun.' "[29]

Sexual relations are most successful when "the woman be tender of years, comely of shape, fair of face, with large breasts and of noble race." Intercourse with such a woman "will add to thee strength and health of body."

"There is in man a vein which feedeth all the other veins. Now water is collected from the three hundred and sixty veins and, in the form of red blood, entereth the left testicle, where it is decocted, by the heat of temperament inherent in the son of Adam, into a thick, white liquid, whose odour is as that of the palm-spathe."[30]

Arabian Medicine

Regardless of the nature of Arabian Nights—whether all fiction or part fact—the writer of the story of Abu al Husn and his slave girl must have been acquainted with many rational medical concepts including the humoral theory, the theory of the four elements, and a considerable knowledge of human anatomy physiology and hygiene.

That the Arabian physician was held in high esteem is shown by the following tale:

"The most wonderful of the events that happened to me in my younger days (said the physician) was this: I was residing in Damascus, where I learned and practiced my art; and while I was thus occupied, one day there came to me a Mameluke from the house of the governor of the city; so I went forth with him, and accompanied him to the governor's residence. I entered, and beheld at the upper end of the saloon, a sofa of alabaster overlaid with plates of gold, upon which was reclining a sick man. He was young; and a person more comely had not been seen of his age. Seating myself at his head I uttered a prayer for his restoration and he made a sign to me with his eye. I then said to him, 'O, my master, stretch forth to me thy hand': whereupon he put forth his left hand. I was surprised at that, and said within myself, 'What self-conceit!' I felt his pulse, however, and wrote a prescription for him. I continued visiting him for a period of ten days, until he recovered his strength. He entered the bath and washed himself and came forth. Then the governor conferred upon me a handsome dress of honor and appointed me superintendent of the hospital of Damascus."

This story indicates the ability of the doctors of the age to cure their patients and is illustrative of the high standing of certain members of the medical profession.

There is another story in a lighter vein told by a doctor which contains a useful lesson for the sick. It tells of a man who was afflicted with severe pain in the stomach. He sent for a doctor. The doctor inquired as to what the sick man had eaten. The patient said he had eaten a large quantity of burnt bread. The doctor prescribed an eye lotion. This greatly astonished the patient who complained that this was certainly no occasion for horseplay. The doctor assured him that he had prescribed advisedly. "I consider," he said, "that it is necessary to cure your eyes in order that you may see the folly of again eating burnt bread."[31]

On one occasion, a man fainted (perhaps conveniently) in the street close to a physician of undoubted reputation. The physician, using his

27. According to the text, Tawaddud hesitated to answer this question and hung her head in shame and confusion before the Caliph's majesty. Thereupon the Caliph insisted that she answer.

28. This notion is of great antiquity.

29. The Hebrew Korah: Numbers 16. This follows a Talmudic tradition that Korah was immensely wealthy.

30. All the aforementioned text is taken from Burton's translation of The Arabian Nights.

31. Burton, Sir R.: Arabian Nights, *opus cited.*

cane as a cudgel and summoning the bystanders to follow his example, beat the sick man upon the soles of his feet and upon his body, until he aroused somewhat. Thereupon the others were encouraged and followed the physician's example. When the sick man, miraculously enough, finally came to, everyone among the assembled Arabians praised the cleverness of the doctor.

Quacks

The following story is interesting because it contrasts the duly qualified physician and the quack.

In a certain town there were two doctors: one of supreme merit and the other, although of not inconsiderable repute, little if anything more than a charlatan and quack. It chanced that the king's daughter became seriously ill. The two doctors were summoned to the palace and the king asked the first physician what he recommended. The good physician expressed his honest and capable opinion concerning the case and stated that a certain medicine contained in the imperial stores would restore the princess to health. "But," said the good doctor, "I am old and weak in sight, and I fear I could scarcely be able to find it, even were I permitted to make a search for the medicine."

Then the other doctor volunteered to make the necessary search. This was permitted, with the result that, not knowing anything about the matter, he selected a drug which was a deadly poison. No sooner had the princess swallowed the draught than she dropped dead on the spot.

In consequence of this catastrophic result, and in full accord with the usual Eastern custom, the careless quack was compelled to drink the remainder of the drug with the inevitable sequel that he just as rapidly passed out of the picture. Thus did the story-teller contrast the work of the qualified medical man with that of the incompetent and disreputable medical man.

At times the Arabian physicians had recourse to mysterious procedures. They wrote with a purgative ink (perhaps prepared from the juice of colocynth and/or scammony) various charms in cups, to purge the faithful patient. They also employed uroscopy and astrology in treating their patients. Such unscientific methods as these were also transmitted by the Arabian physicians to the West.

From a woman's urine, pregnancy was allegedly diagnosed, and even the sex of the child foretold. Our modern pregnancy tests do not attempt to perform this latter task.

The kind of diagnoses frequently made may be inferred from the following case: Thabet ibn Rorra diagnosed a disease between the ribs and the pericardium, not from any physical findings, but in the following manner (according to the patient): "I showed him my urine glass, and he saw in it what was hidden between my ribs and my pericardium. The concealed disease appeared to him as a stain on a polished sword looks to the eye."

As intimated previously, there are instances of quacks who impressed the sick by performing miraculous cures. They hired men to pose as patients and sent them around the neighborhood of their operations to tell the populace of the wonderful cures the doctor had performed upon them. Sometimes a doctor sent his confederate to find out as much as possible about the patient so that when he attended him for the first time, he appeared to have a profound knowledge of the sick person and his family. Such charlatans, of course, were not the monopoly of the Arabs. The European healing profession was by no means free of such imposters. The use of the magic cap *(tarnkappa)* in Germany which rendered one invisible and therefore invulnerable to the attack of the "angel of death" may be regarded as a similar deception. Siegfried's baptism in dragon's blood by which he became vulnerable only in a place about the size of a leaf in the interscapular region, and Achilles sole vulnerability at the heel, are famous mythological examples of the sort of thing that gullible patients believed possible.

Fees

The fee of such doctors seems always to have been stipulated in advance and every effort was made to collect prior to instituting therapy. As little a chance as possible was taken that the death of the patient might terminate the fee. When a patient appeared to be getting worse, the physician demanded at least half the stipulated fee at once.

Physicians-in-ordinary and court-physicians enjoyed high salaries, and often, attained great wealth. In case their treatment failed, however, or their masters turned on them for other causes, they were subject to imprisonment, whipping and even death.

We must remember, of course, that medieval Arabian conditions and customs are not to be compared with those of our modern society. The relations of medical colleagues with each other were usually on a low level. Detraction or calumny against one's colleagues was the customary procedure. There are instances where physicians actually poisoned their professional competitors in order to get rid of them.

The native medicine of the early Middle Ages in Arabia was for the most part practiced by unlettered and primitive barbarians who were on a lower level than the physicians of the peoples they conquered (i.e., Syria, Egypt, Mesopotamia and Persia). Holding no professional advantage over the physicians of the countries they occupied, they were none-the-less willing to learn from the more educated physicians of the conquered countries. The conquering Arabs did not impose a new civilization on their defeated enemies because of the fact that they had none better to impose. But soon after their conquests were completed they became desirous of absorbing what was best from their vanquished foes. They certainly succeeded in invigorating the scattered civilizations then in decline and breathed into them a breath of new life.

Racial Culture

During the early days of the Islamic Conquest, powerful Arab armies, aflame with religious exultation and aroused with the fruits of victory in one country after another—in the name of Allah and his Prophet Mohammed—had not time nor inclination for cultural activities. The conquerors at first had only one desire, to establish their religious domination firmly over the new territories. As a matter of fact, they at first found many of the practices and customs of their new possessions incompatible with their own and whatever appreciation the invading Arab hordes might have had for the arts and crafts of the peoples of their newly conquered countries was more than offset by a basic antagonism and fear of foreign culture.

Even in these early days of conquest, however, the Arabians had some taste for religious poetry and particularly for Arabic grammar. The latter they felt was very necessary to facilitate the teaching of the Arabic tongue to the peoples of the conquered nations. The conquerors proudly boasted that Arabic was the most perfect tongue ever spoken by mankind.

The attention paid to the study of language produced many grammarians of distinction. A number of dictionaries were compiled, one of which consisted of sixty volumes and had each word illustrated by quotations from the Koran and other classic works. Later encyclopedias were also produced, the most noted one being that which was compiled by Muhammed ibn Abdulah of Granada.

A great change in the cultural activities of the Islamic peoples at large began to take place after the aggressive wars subsided and particularly after some of the Caliphates transferred their capitals from Arabia to Damascus-Syria, where a vestige of the Graeco-Syrian culture still survived. In their new possessions, the conquerors gradually dropped their native customs and practices when their own interests were not at stake and began to emulate the Graeco-Syrian savants. From alchemy, which originally attracted them because of its alluring character, they became interested in chemistry and medicine, and offered hospitality to foreign physicians, scholars, philosophers, and artists.

According to Marmaduke Pickthal, in the entire history of mankind, the Arabians, after their conquests were completed, give the only large scale instance where conquerors voluntarily respected and emulated the conquered. Once Mohammedanism was firmly established, complete religious freedom was permitted. The only tribute exacted from the conquered lands was for the cost of protecting their liberty.[32] The Arabs freely allowed their subjects to continue their own legal usages and religious practices and employed no force in their proselytising as was customary in Christian countries.

After the accession of Abu Bakr, father-in-law of Mohammed's favorite wife to the Caliphate, Islam spread into Syria among the monotheistic Nestorians and came in contact with the Hellenism of the Nestorian monasteries—a fact which had an important bearing on the cultural fusion of the Hellenistic and Oriental elements. The Nestorians were the intermediaries between the ancient masters and the victorious Moslems.

It was this Christian sect, the members of which had been exiled to Persia, that first translated Aristotle into Arabic. Once their translations had been begun, they did not cease working on

32. cf. Marmaduke Pickthal: The Cultural side of Islam. Published by the Committee of Madras on Islam, 1927.

them for a century and a half, during which time nearly all of the Greek literature in the natural sciences passed into the Arabic language. The Nestorian culture thrived best in Persia during the tolerant rule of the Sassaman dynasty, where the heretical Nestorians found welcome refuge. The Academy of Jondisabur was greatly influenced by the scholarly Nestorians. This academy became the greatest center of learning and attracted students from all the Eastern countries. This university was the first in the East where the system of medicine taught to the students was based on Greek medical science.

Nestorius

The founder of the Nestorian sect was Nestorius who was born at Germanicia, near Mount Taurus, where he studied theology. The Syriac subjects of Seleucis had been Christianized early. However, their views had been leavened by powerful Greek influences and they were unwilling to abandon the wisdom of Hippocrates and Aristotle for the views of the orthodox Patriarchs of the Eastern Christian Church. A major schism arose, and this heretic sect of Christians—at the head of which was Nestorious—established what is known as the Nestorian Church. The members of this schismatic subdivision acknowledged Christ but clung fiercely to the philosophy of Greece.

Most of their cities were orginially Greek colonies in which institutions had been set up modeled after those of Athens. Richly endowed with the spirit of speculative science, they remained at heart true to the old traditions. Nestorius' fame as a scholar and teacher of the Christian religion became so widely spread that he was consecrated as a Patriarch in Constantinople. After a few years in office he became the victim of jealousies and intrigues and was deposed from his partiarchal position in 431 by the Council of Ephesus. The heretical doctrine imputed to him consisted of the allegation that he denied the complete mergence of the divine and human natures into Christ, and that he claimed that Mary, the mother of Christ, ought not to be called the mother of God. He was retired into the monastery of Antioch in 435, and from this institution, he was banished to Petra, Arabia, and later to the Great Oasis in Upper Egypt.

His followers fled eastward. Many of them went to Edessa, where a school of medicine had been flourishing for centuries. The school was the center of Nestorian activities until 489, when it was closed by order of the Emperor Zeno, thus causing a further dispersion of the Nestorians. These zealous Nestorians then proceeded to carry the doctrines of Nestorius throughout the whole length of Asia. The Nestorians for many centuries formed the main links between East and West. In 762 considerable of their number came to Bagdad.

The Nestorians had a large share in the translation of many Greek works on mathematics and medicine into Syriac. Their activity continued until the ninth century. The translations of classic Greek works into Arabic were generally made with the help of Syriac versions. The Nestorians and Jews were especially well fitted for this task because of their knowledge of languages. Members of these groups had a first class knowledge of Greek, Syriac, Arabic and Persian.

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Gordon, M. B.: Medicine among the ancient Hebrews. Isis, 33: (part 4, No. 90) 454-485 (Dec.) 1941.

CATALOG OF HEALTH FILMS FOR TV

An excellent catalog of public health motion picture films cleared for use on television has been prepared by public health officials of the Kalamazoo City-County Health Department. Entitled, "Health Education by Television," the catalog contains a list of films which were selected and shown on the "Here's to Your Health" public service program on Kalamazoo's station WKZO-TV. The AMA has been granted permission to reproduce this catalog and make it available without charge to those interested in using health films on television. Requests for the catalog should be made to the AMA Committee on Motion Pictures and Medical Television.

This Opportunity Doesn't Expire In November

This year of all years—particularly in the next few weeks—the doctor of medicine must recognize his duties as a citizen.

Yes, Doctor, your first job is to be scientific—to be the best medical man you are able to be, in the interest of constantly better service to your patients. But there's another side that every doctor of medicine must possess if he would help preserve scientific medicine as a free entity in the best interests of the people: the doctor must be interested in socio-economic matters, including politics (and I use the word "politics" in its true sense).

Maybe it's a cliche to say that our country is "at the crossroads." Nevertheless, that situation does exist today, and physicians must fully realize their opportunities as good citizens as well as their responsibilities as good doctors.

I hold it a privilege to urge every MSMS member to become acutely active as a citizen, which includes avid interest in civic and governmental affairs on the national, state, and local levels. To be blunt, I make bold to say: Maintain your interest in politics or politics will lose its interest in you. And here the "you" refers to you, not as practitioner of medicine but as a member of the body politic. Someone has said, "Bad officials are elected by good citizens who do not vote."

Finally, your obligation is not one that expires on Election Day, November 6, 1956, Your duties as a citizen, as one working for the constant betterment of the people and your country as a whole, are permanent. Your *temporary* interest would be only a bid for victory to those whose permanent job it is to try to exchange our American freedoms for the compulsions and constraints of Iron Curtain policies. Doctor, be an active citizen today, as well as on next November 6, and during all your days.

* * *

My tenure of office as your President has been a busy but pleasant experience. I come to the end with gratitude to you all for having allowed me this greatest honor of my days. As Past President of the best State Medical Society in the land, I pledge a continuation of my great zeal for MSMS. I shall work for all its projects and consider it a privilege to continue to labor in behalf of its policies because its policies are not selfish—they are not for the physicians alone but for those who are served by the physicians, the people of Michigan.

W. D. Jones

President, Michigan State Medical Society

President's



Message

Editorial

MEDICAL EDUCATION

In the ten years ending in 1954, the two medical schools in Michigan graduated 1,658 doctors of medicine who passed the requirements of the Michigan State Board of Registration in Medicine and were licensed to practice in our state, 1,057 were from the University of Michigan and 601 from Wayne. During the same ten-year period, the State Board licensed 2,635 doctors from other states and Canada and twenty-eight from foreign schools, making a grand total of 4,321.

Michigan has been derelict in her duty. For ten years, the state has educated and furnished an average of 166 new doctors of medicine per year for the care of our people, but we have imported from other sources an average of 265 per year. We are told there are 174 Michigan students studying medicine in other states now, and an effort is being made to induce as many of them as possible to return to our state for practice, but even that would be an entirely inadequate number.

The University of Michigan School of Medicine is now graduating two-hundred doctors of medicine every year and Wayne University College of Medicine is graduating seventy-five. If all these were to remain in Michigan, the numbers would still be grossly inadequate for our needs. The University of Michigan School of Medicine is training about the maximum efficiently possible for the best instruction. Wayne University College of Medicine now has the physical plant capable of an increased student possibility of about fifty but does not have the funds necessary for the increased faculty needed.

Wayne has been taken over as a state university. The State of Michigan has always risen to her responsibilities and we, the medical profession propose that our legislature make an extra appropriation of sufficient funds to pay for the new teachers required. The most inexpensive and most logical plan to give us another fifty doctors is at our door—a few extra teachers for an already established medical school. The medical profession and many communities strongly urged the establishment of a third medical school in Michigan no later than the early part of this year. We assume that committees are quietly working on the project but the obvious immediate need which could be supplied is hereby suggested.

Incidentally, there are more than 1,600 osteopaths in Michigan. There are reported to be about 200 Michigan students studying osteopathy, of whom sixty are returning to this state every year.

Such is the situation. Many students who would like to study medicine have been disappointed by inability to find openings—some are reported to have taken osteopathy instead.

Positive action is indicated.

NATIONAL LEGISLATION

The 84th Congress is now history. Several bills have been enacted in which the medical profession is interested.

The amendment to social security (HR. 7225) allowing women to draw benefits at age sixty-two was passed, and we fail to see the logic. Women naturally outlive men and mostly do not have to retire any younger.

Provision was also made for benefits to totally handicapped persons at age fifty. Previously they were not recognized because of handicap, but did retire and become eligible for benefits on account of age. The barrier here has now been broken and the age can be reduced at any time The medical profession protested the methods of determining disability as encroaching upon government medicine.

The osteopaths were included in social security. The medical profession and the Christian Scientists are now about the only group excluded.

A National Library of Medicine was provided (S.3958) using the Surgeon General's library as a basis and consolidating various units. The place of location is to be left to a commission.

The Omnibus health bill (S. 3430) and ample appropriation was passed, including matching grants for construction of medical research facilities, water pollution control grants and administration, a National institute for Dental Research, traineeships for graduate and practical nurses and

public health workers, around-the-clock quarantine inspection of incoming vessels—to mention only a few.

The Hill-Burton program is extended to July 1, 1959.

MEDICAL SOCIETY DUES

Doctors of medicine are probably inborn complainers when the question of dues to meet the expenses of their medical societies comes up. Recently we heard a group of about forty members of a specialty society reject a proposal to increase dues from $2.00 a year to $5.00.

The question of dues for our state medical society prompted the Council to make a study of state society dues throughout the nation—a study which received the applause of the AMA Secretary and General Manager in one of his weekly letters.

Nevada pays the most, $100 a year plus a $20 special assessment for AMEF; North Dakota and South Dakota pay $75; New Mexico pays $70; Wisconsin pays $65; Arizona pays $60 now to be increased to $70 for 1957; Iowa pays $60 per year; Montana pays $53.50; and the following pay $50: California, Colorado, Delaware, Louisiana, Maryland (Baltimore only), Rhode Island, Texas, Utah, Washington, D. C.

Michigan pays $45 not including the $10 special assessment for 1956, while Oklahoma pays $42 and the following pay $40: Florida, Idaho, Illlinois, Kansas, Minnesota, New Hampshire, North Carolina, Oregon and Pennsylvania. The $35 states are: Kentucky, Maine, Massachusetts, Mississippi, Nebraska, Vermont and Washington. The rest are $30 or lower, except that after January 1, 1957, Alabama will pay $50, Maine will be raised to $60 in June, 1956, and Mississippi will raise its dues $5 a year to a total of $50 until 1959.

What do we get for our dues? Doctors of Michigan have built great semi-annual meetings and postgraduate study courses and they have provided the means to distribute to all our membership advances in medical knowledge through medical journals, publications and books. We have revamped and vastly extended the medical education program. We have through our state and local units provided methods and facilities for our patients to afford and have available the best possible medical attention through the establishing of prepaid plans. We have preserved the private practice of medicine for all who wish to enjoy it. The profession throughout the ages has eliminated most of the great and small plagues. We have established public health services and maintained them. All these have been primarily to benefit our people, to relieve their health burdens and their financial calamities. In doing these things our social structure has risen to unexpected heights. Satisfaction to ourselves has kept pace with the returns to our public.

RHEUMATIC FEVER PROPHYLAXIS PROGRAM

Several questions have arisen concerning the Rheumatic Fever Prophylaxis Program.

1. "Is it possible for me to bill the Michigan Crippled Children Commission for prophylactic administration of benzathine penicillin G provided by the Michigan Department of Health in cases where the acute care was paid for by insurance or in some other fashion not requiring a court order under the Afflicted Children's Act?"

In such instances a physician's certificate should be made in the usual fashion, stating that the child's condition can be remedied in the nearest Michigan State Medical Society Rheumatic Fever Diangostic Center and that outpatient service is desired. The cost of this consultation will be borne by the Michigan Crippled Children Commission, and the referring physician will receive a report. Since the Michigan Crippled Children Commission cannot pay for conveyance in such cases, these children will have to be taken to the Rheumatic Fever Diagnostic Center at the expense of their family.

After the child has had diagnostic care "for rheumatic fever under the Afflicted Children's Act," his physician may bill the Commission on the prescribed forms for prophylactic administration of benzathine penicillin G at monthly intervals until the child attains the age of twenty-one years. *For this purpose only* no further court order will be required.

2. "This child is allergic to benzathine penicillin G. Is there any way some other antistreptococcal agent can be provided under the joint program of the Michigan Department of Health and the Michigan Crippled Children Commission?"

At the present time, no. Your Michigan State

(Continued on Page 1140)

Detroit Surgical Association

Meeting of April 23, 1956

INTRA-CARDIAC SURGERY USING PUMP OXYGENATOR

LYLE F. JACOBSON, RUDOLPH CASTELLANI, FRANK AKAMINE, and HERBERT ROBB

This is a preliminary report of our initial experimental work in the field of open heart surgery. To date, three methods have been used in our laboratory for achieving the state of total heart-lung by-pass, namely, continuous arterial perfusion, cross-cirulation and the pump oxygenator. Each of these methods entails the use of the Sigma motor finger pump and an extracorporeal system of plastic tubing. The oxygenator employed is comparable to that recently described by Lillehei and devised by DeWall.

A total of thirty dogs have been bypassed, five by means of arterial perfusion, ten by way of cross-circulation and fifteen by way of the pump oxygenator. Physiologic studies during the bypass period indicate that cardiac bypass is accompanied by hypotension, by metabolic acidosis and by an increase in the co-efficient of utilization of oxygen. All these changes were demonstrated to be reversible.

Thus far the overall results are sufficiently encouraging to warrant anticipation of early clinical trial.

REPORT ON CLINICAL AND PHARMACOLOGIC EVALUATION OF A STEROID ANESTHETIC AGENT

L. E. LEE, Jr., M.D., A. CHEN, M.D., and F. A. MONTMORENCY, M.D.

Twenty-one hydroxypregnane (3-20 dione sodium succinate (hydroxydione)) is a pregnandiol derivative designated Viadril. It is the first water soluble steroid agent demonstrating anesthetic properties when administered intravenously.

Clinically we have carefully evaluated cardiovascular and respiratory responses and postoperative complications of Viadril in 143 patients subjected to a wide variety of operations under this as the sole anesthetic or when used as basal anesthesia. Basic pharmacologic evaluation of cardiovascular and respiratory phenomena have been recorded at various electroencephalographic levels of anesthesia in eighteen dogs and nine normal human subjects.

Our preliminary impressions are that there is little alteration in fundamental cardiovascular and respiratory function in patients anesthetized by Viadril. In dogs, Viadril hemolizes the blood in considerable proportion, but we have not found this complication in humans. Viadril decreases respiratory tidal exchange without significant alteration in minute volume, blood oxygen and CO_2 content or pH. Only slight alterations in cardiac output occur, and may be accounted for on the basis of calculated changes in peripheral resistance. Viadril is a local irritant causing graduations of venous irritation from minor complaint of burning discomfort over the course of the vein used for injection up to and including post-anesthetic evidences of thrombophlebitis. Detailed studies are in progress, but at present our impression is that this is a promising drug, the significance of which is less in Viadril than the possibilities it indicates for improved steroid agents as intravenous anesthetics.

THE MECHANISM OF INTESTINAL RUPTURE FROM NON-PENETRATING ABDOMINAL TRAUMA

THOMAS GEOGHEGAN M.D., and BROCK E. BRUSH, M.D.

It has been commonly taught concerning rupture of the intestine from nonpenetrating abdominal trauma that the perforation is a crush injury which occurs in the fixed portions of the bowel when it is compressed against the spine or pelvis.

A series of experiments was done on dogs in an attempt to reconstruct the mechanism of rupture of the bowel wall in these injuries. The experimental results were compared with a clinical series of twenty such lesions.

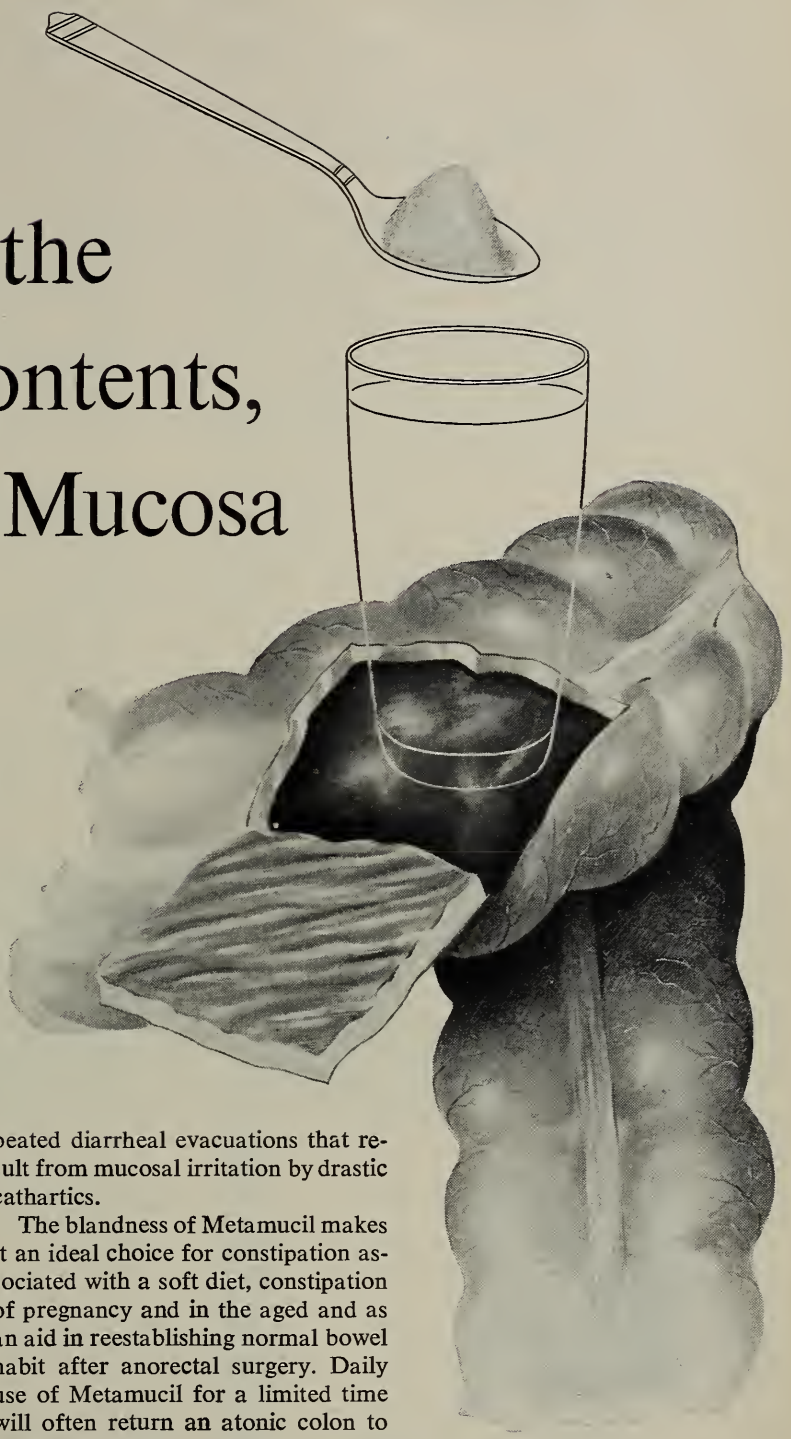
Pressures in the gastrointestinal lumen increased to the level of the bursting strength of the bowel wall following abrupt forces in the neighborhood of 16 foot pounds. Severe crushing injuries were associated with intramural hematomata and mesenteric bleeding. Clean perforations of the bowel wall represented bursting lesions occurring at from three to eleven o'clock on the side of the bowel where the main vasa recta pierce the submucosa. The fixation of the bowel by a short mesentery did not appear to have an influence on the location of the lesion. This was borne out in the clinical series, as most perforations were located in mobile loops of small intestine.

Meeting of May 15, 1956

The Detroit Surgical Association held its annual meeting on May 15, 1956, at the Detroit Boat Club. The annual McGraw lecture was given by Dr. James T. Priestley, Professor of Surgery, Mayo Foundation. His topic was "Hyperfunctioning Lesions of the Adrenal Gland." The McGraw Medal was awarded to Dr. Charles G. Johnston and Dr. James T. Priestley.

CORRECTS MOST TYPES OF CONSTIPATION

Metamucil® Blends with the Intestinal Contents, Soothes the Mucosa



Metamucil is highly refined; it stimulates the bowel musculature, not the mucosa.

When you specify Metamucil in constipation management you are selecting a product which has been made at least 99.6 per cent pure through a complete process of refinement.

All possible irritants (rough parts of the psyllium seed, undesirable oils and similar materials) are discarded during the refining process. A relatively small quantity of purified mucilloid powder is the result. To this is added an equal weight of pure anhydrous dextrose to insure complete dispersion in the colon.

Such meticulous preparation assures that only the bulk-producing mucilloid portion of the psyllium seed remains and that Metamucil will act as a purely "physiologic" constipation corrective, providing bland distention to stimulate the bowel muscularis.

The Metamucil mixture (formed by adding water to Metamucil) elicits gentle colonic reflex peristalsis. Evacuations are normally formed and are not irritating. The bowel stimulation imparted by Metamucil is only sufficient to clear the colon of its contents; patients are not annoyed by the repeated diarrheal evacuations that result from mucosal irritation by drastic cathartics.

The blandness of Metamucil makes it an ideal choice for constipation associated with a soft diet, constipation of pregnancy and in the aged and as an aid in reestablishing normal bowel habit after anorectal surgery. Daily use of Metamucil for a limited time will often return an atonic colon to normal function.

Metamucil® is the highly refined mucilloid of Plantago ovata (50%), a seed of the psyllium group, combined with dextrose (50%) as a dispersing agent. It is supplied in containers of 1 pound—also 4 ounces and 8 ounces.

G. D. Searle & Co., Chicago 80, Illinois, Research in the Service of Medicine.

SEARLE

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

TYPHOID HIGHEST IN TEN YEARS

Michigan is experiencing the same typhoid rise that is taking place in other north central states.

Typhoid fever cases reported to the Michigan Department of Health during the first six months of 1956 totalled thirty, the largest number during the first six months of any year in the last ten.

Study of known carriers in Michigan reveals Phage type E_1 to be the most common type. The source of recent cases seems to be obscure and the usual methods of detection within the close contact group apparently do not apply.

Modern complexities of food processing and distribution make detection of contaminated food increasingly difficult. This makes even more important continued alertness at the local level to find any typhoid carriers among employes in food-connected occupations and to exercise close supervision of known carriers to make sure that they have no contact with food handling or processing.

Data on the thirty typhoid cases are given in the table that follows:

REPORTED CASES OF TYPHOID IN MICHIGAN

During the First Six Months of 1956

Month	*County*	*Age*	*Sex*
January	Jackson	10	F
January	Muskegon	40	F
January	Sanilac	7	F
February	St. Clair	20	M
March	Saginaw	9	F
March	Wayne (Detroit)	10	M
April	Allegan	10	F
April	Eaton	11	M
April	Eaton	37	F
April	Eaton	35	F
April	Eaton	62	M
April	Wayne (Detroit)	18	M
April	Wayne (Detroit)	53	F
May	Branch	37	M
May	Emmet	37	F
May	Genesee	47	M
May	Hillsdale	86	F
May	Isabella	23	F
May	Isabella	34	F
May	Kent	10	M
May	Leelanau	18	M
May	Mecosta	62	M
May	Oakland	12	F
May	Saginaw	16	F
May	Saginaw	55	M
June	Genesee	25	F
June	Ingham	35	F
June	Saginaw	18	F
June	Wayne (Detroit)	64	M
June	Wayne (Detroit)	44	F

CONTROLS MODIFIED ON POLIO VACCINE

Effective August 1, Rule 10 of the Rules and Adminintrative Policies governing the distribution and use of poliomyelitis vaccine in Michigan was rescinded, permitting vaccine purchased through regular drug outlets to be used for persons of any age. Vaccine usage cards are no longer required for vaccine purchased by physicians.

The Public Health Service is still responsible for the safety and the potency of each lot of vaccine released but they no longer exercise any control over its distribution, and the product is therefore now on the open market.

Rule 8 governing the use of poliomyelitis vaccine purchased with state funds for free distribution is still in effect. State-purchased vaccine may be used only for children one through fourteen years of age and pregnant women. This priority was established by legislative act. A vaccine usage card is required for each dose of state-purchased vaccine that is used.

The Michigan Department of Health will continue to purchase vaccine for free distribution for the priority group aged one through fourteen and pregnant women, within the limits of its current appropriation for this purpose.

The department urges physicians to continue to give first consideration to the age group fifteen through nineteen years in their use of vaccine purchased by them.

SUMMER FLUORIDE PROGRAM COMPLETED

Some 35,000 Michigan children in forty-two counties had fluoride applications to their teeth this summer in the seventh year of intensive summer fluoride programs. These summer programs supplement the year-around program carried on by many communities, and the combined programs now serve 300,000 Michigan children.

Operating in 160 centers, this summer's activities were sponsored as usual by local health departments, schools and civic groups. A nominal fee paid by parents who can afford it makes the summer programs self-supporting.

The fluoride applications were given this year by fifty-four students from the University of Michigan and the University of Detroit, all junior dentists and dental hygienists. Before going into the field they were given brief, intensive training by dental staff members of the Michigan Department of Health. Work in the field was supervised by local dentists.

GYNECOLOGIC CYTOLOGY SERVICE

Interpretation of Cervico-Vaginal, Etc. (Papanicolaou) Smears for the Diagnosis of Carcinoma

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and control of
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In Memoriam

William B. Brace, M.D., Ann Arbor, well known to thousands of students through his years as physician in charge of medical service for men at the University of Michigan Health Service, died April 25 at the age of sixty-one. Born in Detroit, Dr. Brace received his premedical and medical schooling at the University of Michigan, receiving his M.D. in 1923. He remained with the University Hospital after internship, transferring to the Health Service in 1928, and later becoming assistant professor of Hygiene and Public Health in the School of Public Health. Veteran of World War I, he was formerly President of Washtenaw County Medical Society and physician for the University marching band.

Claire H. Carpenter, M.D., Associate Director of the Northwest Branch of Grace Hospital, Detroit, died June 27 following a brief illness. He was sixty-three years old. Born at McBrides, Michigan, he graduated from Northwestern University in 1913 and Hahnemann Medical College in 1918. He interned at Rochester, New York, then served on the psychiatric staff at Traverse City State Hospital until 1924, when he moved to Detroit. He had been Associate Director of Grace Hospital for eleven years.

Louis H. Chamberlain, M.D., age eighty-two, chief of staff at St. Mary's Hospital, Grand Rapids, and a practicing physician and surgeon there for fifty years, died May 12 at Winnetka, Illinois. He was born at Port Dover, Ontario, but lived in Grand Rapids from the age of nine. He received his medical degree from Wayne State University in Detroit, and at one time served as an instructor at the old Grand Rapids Medical College. He was a veteran of World War I, serving as a surgeon in the Army Medical Corps.

E. W. Fitzgerald, M.D., who had practiced in Port Huron since 1946, died July 8 at the age of fifty-five. Born and reared in Detroit, he took premedical studies at the University of Detroit and was graduated in 1925 from St. Louis University Medical School. He interned at Harper Hospital, Detroit, then held a residency at Sloane Hospital for Women, New York City, before entering practice in obtsetrics and gynecology in Detroit, remaining for fourteen years before entering military service in 1941. Dr. Fitzgerald served with the navy during World War II, attaining the rank of captain and seeing combat action in many areas of the South Pacific as senior medical officer on the USS President Adams.

William J. Gelhaus, M.D., of Monroe, died suddenly May 30 at age fifty-nine. He was born at New Weston, Ohio, and served in the Navy during World War I before completing his college education. Graduated from Ohio State University Medical School in 1923, he interned at St. Mary's Hospital, Detroit, and St. Rita Hospital, Lima, Ohio. Dr. Gelhaus had been a physician and surgeon in Monroe since 1929.

Louis O. Horvath, M.D., a Detroit physician for sixteen years, died June 13 at the age of fifty-one. Born in Hungary, he was graduated from Wayne State University College of Medicine in 1938, served his internship at Grace Hospital, then entered private practice.

Julius S. Janci, M.D., aged fifty-one, of Owosso died suddenly May 31. He was born in Butler, Pennsylvania, received his B.S. degree from the University of Michigan, and his M.D. degree from the Wayne State University; interned at Providence and Tassie Hospitals, served in the Army Medical Corps during World War II, reaching the rank of captain. Dr. Janci had practiced medicine in Owosso since 1937.

Abraham Leenhouts, M.D., physician and community leader in Holland for fifty-six years, died July 3, three weeks before his ninetieth birthday. He was born in Zeeland, attended Hope College, and was graduated from the University of Michigan Medical School in 1891. After postgraduate study at Rush Medical School, Chicago, and five years of practice in that city, he established his practice in Holland in 1900. Dr. Leenhouts served in the Army Medical Corps during World War I. He was an emeritus member of MSMS.

Duncan J. Monroe, M.D., retired Elkton physician and a life member of MSMS, died April 21 at the age of eighty-one. He was born at Aldboro, Ontario, reared in Cass City, and graduated from Saginaw Valley Medical College in 1903. After four years of practice at Harrisville, he moved to Elkton in 1907, practicing there until his retirement in 1953.

Allan R. Peterson, M.D., of Daggett, died at age fifty-five of a heart attack on June 24 while attending the Upper Peninsula Medical Society meeting in Sault Ste. Marie. He was President-elect of the Menominee County Medical Society and active in many civic affairs. Born in Marinette, Wisconsin, he graduated from Carroll College, and received his medical degree from Northwestern University in 1928. He had practiced in Daggett for twenty-eight years.

Stanley B. Robertson, M.D., aged sixty-four, a physician and surgeon in Detroit for thirty-seven years, died June 8. Born in Hillsdale, he was graduated from Hillsdale High School and Hillsdale College, then attended medical school at the University of Michigan and the old Detroit College of Medicine (now Wayne State University), receiving his M.D. degree from the latter in 1918.

Fred L. Robinson, M.D., aged fifty-eight, a practicing physician in Dearborn since 1928, died July 5. He received his M.D. degree from the University of Michigan in 1924.

William Scott Sims, M.D., of Detroit, died suddenly on June 11. A graduate of Meharry Medical College, Nashville, Tennessee, he had practiced in Detroit since his discharge from the Army Medical Corps ten years ago.

Charles A. Teifer, M.D., a practicing physician and surgeon in Muskegon since 1917, died suddenly June 6 at the age of sixty-four. A former president of the Muskegon County Medical Society, he served two terms on the State Board of Registration in Medicine. Born in Trenton, Michigan, graduated from Detroit Central High School, and received his M.D. degree in 1916 from what is now Wayne State University College of Medicine.

Harold L. Van Haltern, M.D., aged forty-eight, a Pontiac radiologist, died suddenly June 23. Born in Athena, Oregon, he was a graduate of the University of Texas Medical School, establishing his practice in Pontiac, eleven years ago.

Communication

W. S. Jones, M.D.
President, Michigan State Medical Society
Menominee, Michigan

Dear Dr. Jones:

You and your association can be justly proud of William J. Burns, who served as a member of our faculty during a most successful session of National Institute at Michigan State University.

Mr. Burns distinguished himself as an instructor in the fundamental course on "Membership Problems."

National Institute is a co-operative endeavor sponsored by the Chamber of Commerce of the United States, Michigan State University, and executives of Chambers of Commerce and Associations. This co-operative endeavor is made possible by the support of the sponsoring groups and the aid of instructors and their organizations—who invest in terms of time and money an essential contribution to the success of this training program.

We are grateful to you for making it possible for Mr. Burns to serve on our faculty. However, it is fitting for us to mention that our faculty is chosen with great care, and we hope you consider it a singular compliment that Mr. Burns was selected to serve as instructor for the above course.

Chicago, Illinois
July 24, 1956

Cordially,
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National Institute for
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**References and clinical trial supplies available on request.*



. NEWS MEDICAL

MICHIGAN AUTHORS

William H. Beierwaltes, M.D., Ann Arbor, is the author of an article entitled "Thyroid Gland" published in the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, February, 1956, and condensed in *Current Medical Digest,* June, 1956.

W. S. Reveno, M.D., Detroit, is the author of an article entitled "Gleanings—1955 Meeting American Goiter Association," published in the *Harper Hospital Bulletin,* May-June, 1956.

A. H. Hirschfield, M.D., Detroit, is the author of an article entitled "The Shrinking Ego Area in Schizophrenia," published in the *Harper Hospital Bulletin,* May-June, 1956.

John R. Simpson, M.D., Detroit, is the author of an article entitled "Hypertrophic Osteoarthropathy as an Early Sign of Pulmonary Neoplasm," published in the *Harper Hospital Bulletin,* May-June, 1956.

V. Berg, M.D., and **M. Dufresne, M.D.,** Detroit, are the authors of an article entitled "Excretory Urography in the Pediatric Patient With the Aid of Carbonated Beverage," published in the *Harper Hospital Bulletin,* May-June, 1956.

John C. Mayne, M.D., Detroit, is the author of an article entitled "Abstracts—1955 Meeting Central Association of Obstetricians and Gynecologists," published in *Harper Hospital Bulletin,* May-June, 1956.

William E. Jahsman, M.D., Detroit, is the author of an article entitled "An Approach to the Etiology, Diagnosis and Management of Peripheral Arteriosclerosis," published in *Henry Ford Hospital Medical Bulletin,* June, 1956.

Joseph L. Fleming, M.D., Detroit, is the author of an article entitled "Bilateral Agenesis of Upper Extremity," published in the *Henry Ford Hospital Medical Bulletin,* June, 1956.

M. J. Brennan, M.D., K. D. McGinnis, M.D., and **L. Preuss, M.S.,** Detroit, are the authors of an article entitled "Experience With Intra-Cavitary Radiogold at Henry Ford Hospital," published in the *Henry Ford Hospital Medical Bulletin,* June, 1956.

M. A. Blenkenhorn, M.D., Detroit, is the author of an article entitled "Acute Miliary Disease of the Lung Diagnosis and Treatment," which is an abstract of a presentation before the Henry Ford Hospital Medical Society, and was published in the *Henry Ford Hospital Medical Bulletin,* June, 1956.

David Barsky, M.D., Detroit, is the author of an article entitled "Central Retinal Vein Occlusion Treated with Anticoagulant and Steroid Therapy; Case Report and Discussion," published in the *Henry Ford Hospital Medical Bulletin,* June, 1956.

Charles Long, II, M.D., Detroit, is the author of an article entitled "Myofascial Pain Syndrome," published in the *Henry Ford Hospital Medical Bulletin,* June, 1956.

Richard R. Knowles, M.D., Detroit, is the author of an article entitled "Neurological Disorders Associated With Hepatic Diseases," published in the *Henry Ford Hospital Medical Bulletin,* June, 1956.

Anthony C. Nolke, M.D., Detroit, is the author of an article entitled "Severe Toxic Effects From Aminophylline and Theophylline Suppositories in Children," published in the *Journal of the American Medical Association,* June 23,1956, and read before the Michigan Branch of the American Academy of Pediatrics, Detroit, September, 1954.

A. Robert Bauer, M.D., Detroit, is the author of an article entitled "Mechanical Respirator for Newborn Infants and Other Patients," published in the *Journal of the American Medical Association,* June 23, 1956.

Ruth M. Ellis, M.D., Pontiac, is the author of an article entitled "How the AMWA Can Help Me in the Pursuit of My Career," published in the *Journal of the American Medical Women's Association,* June, 1956.

Thad H. Joos, M.D., Norman S. Talner, M.D., and **James L. Wilson, M.D.,** Ann Arbor, are the authors of an article entitled "Risk of Surgery in Poliomyelitis Patients Dependent on Respirators," published in the *Journal of the American Medical Association,* July 7, 1956.

Samuel J. Nichamin, M.D., Detroit, is the author of article entitled "Kartagener's Syndrome in a Newborn Infant," published in the *Journal of the American Medical Association,* July 7, 1956.

Fred Jenner Hodges, M.D., Ann Arbor, is the author of an article entitled "The Growing Importance of Cardiovascular Radiology," based on the Tenth George Winslow Holmes Lecture presented before the New England Roentgen Ray Society, Portland, Maine, May 20, 1955, and published in the *New England Journal of Medicine,* July 5, 1956.

P. W. Pifer, M.D., M.A. Block, M.D., and **C. P. Hodgkinson, M.D., F.A.C.S.,** Detroit, are the authors of an article entitled "Thrombocytopenia and Hemorrhage in Hemolytic Blood Transfusion Reactions," published in *Surgery, Gynecology and Obstetrics,* August, 1956.

J. T. Ferguson, M.D., Traverse City, is the author of an article entitled "Azacyclonol: Use of a New Pharmacologic Agent in Chronic Schizophrenia," published in *Antibiotic Medicine & Clinical Therapy,* July, 1956.

William H. Roberts, M.D., and **J. Reimer Wolter, M.D.,** Ann Arbor, Michigan, are the authors of an article entitled "Ocular Chrysiasis," published in *A.M.A. Archives of Ophthalmology,* July, 1956

A. D. Ruedemann, Jr., M.D., and **W. K. Noell, M.D.,** Detroit, are the authors of an article entitled "The Effect of Epinephrine Upon the Rabbit Electroretinogram," published in *A.M.A. Archives of Ophthalmology,* July, 1956.

M. K. Newman, M.D., George V. Pendy, M.D., A. S. Goldstein, M.D., and **Goodwin D. Katzen, M.S.,** Detroit, are the authors of an article entitled "The Use of Resyl as an Adjunct in the Treatment of Cerebral Palsy," published in the *American Journal of Physical Medicine,* June, 1956.

Z. F. Endress, M.D., and **F. R. Schnell, M.D.,** Pontiac, are the authors of an article entitled "Varicella Pneumonitis," published in *Radiology,* May, 1956.

J. E. Magielski, M.D., Ann Arbor, is the author of an article entitled "The Ear," part of a Symposium on Errors in Early Diagnosis and Treatment of Cancer in the Upper Respiratory Tract," which was presented at the Sixteenth Annual Session of the American Academy of Ophthalmology and Otolaryngology, October, 1955 in Chicago, and published in *Transactions of the American Academy of Ophthalmology and Otolaryngology,* May-June, 1956.

Paul V. Woolley, Jr., M.D., and **William A. Evans, Jr., M.D., Detroit,** are the authors of an article entitled "Significance of Skeletal Lesions in Infants Resembling Those of Traumatic Origin," published in the *Journal of the American Medical Association,* June 18, 1955.

* * *

Reuben L. Kahn, M.D., world famous scientist, developer of the Kahn Reaction, has been retired by the University of Michigan because of age. He is now relieved of classes and administrative duties, but will continue in the Dermatology Department. He will devote his full time to continuing the lines of research which he has been following.

The Journal of the Michigan State Medical Society in its issue of October, 1948, remembered the twenty-fifth anniversary of Dr. Kahn's great work, and in addition to his picture on the cover presented interesting original papers and bibliographies. We remember with pleasure working with the doctor on that occasion.

The *University Hospital Star,* August, 1956, publishes a good description of the memorial banquet, with a late picture painted in Ann Arbor and presented to the University. Friends have initiated the establishment of a "Reuben L. Kahn Lectureship Fund" in the University. As the fund increases the income will be used for a guest lecture on serology and immunity.

The Editor, the Publication Committee, and the Michigan State Medical Society add their congratulations and felicitations to a great Michigan scientist.

* * *

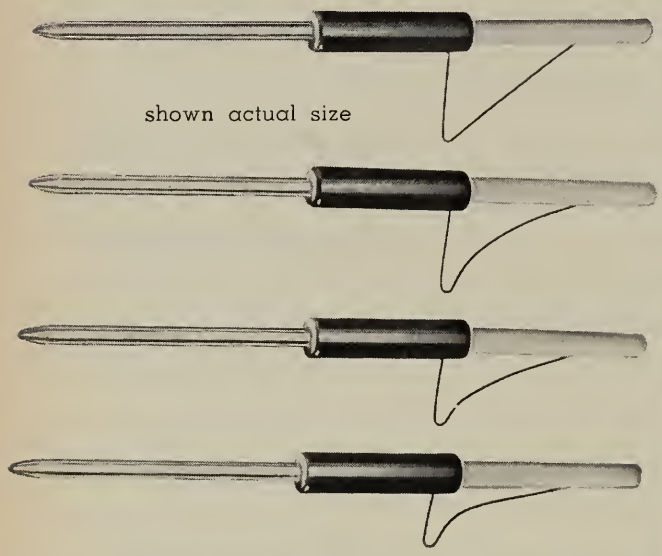
M. K. Newman, M.D., Detroit, talked on June 18, 1956, to the staff of the Department of Rehabilitation at the University of Iowa on Physical Medicine and Rehabilitation. He was also a speaker at the ninth Annual Conference on Aging, which was held at Ann Arbor, Michigan, on July 10, 1956. The subject of this talk was "Physical Medicine and the Management of the Patient After Hospital Rehabilitation."

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**Described in his paper which will be sent on request*

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In Michigan too much tuberculosis is found too late. The record of newly reported cases each year includes: (1) inactive cases—these were missed while they were active; (2) moderately and far advanced active cases—these were missed in the minimal stage; and (3) cases reported for the first time on death certificates,—these were missed throughout the course of the disease.

Michigan's 1954 record of new TB cases included 4,120 such missed cases, reported too late to prevent the infection of others. To prevent the spread of tuberculosis the aim must be to find all cases and find them in the early stages.

MICHIGAN TUBERCULOSIS ASSOCIATION

* * *

The National Foundation for Infantile Paralysis has announced awards of more than $8,700 to seven Detroiters for training and research.

Dr. George A. Vidaver, of 20400 Stratford, received a $4,600 March of Dimes fellowship for advanced training in laboratory research. Dr. Vidaver will study at the Institute for Enzyme Research at the University of Wisconsin.

A scholarship worth $1,157 was awarded to Carol M. Krohn, of 17337 Snowden, to complete her studies in physical therapy at the University of Michigan.

* * *

Five Wayne University students received $600 each for 12-week studies at the university's College of Medicine.

Irving M. Miller, of 18297 Woodingham, and Allen R. Taurig, of 2997 Buena Vista, will study public health and preventive medicine.

Gilbert J. Galens, of 18224 Appoline, and Bernard W. Bigley, of 3310 Rochester, will do research in the biological and physical sciences related to medicine.

Bernard J. Fogel, of 3737 Glendale, will study physical medicine and rehabilitation.—*Detroit Free Press,* July 16, 1956.

* * *

A **unique** medical publication, *Medical Director's Notebook,* from Paul F. MacLeod, M.D., medical director of Eaton Laboratories, Norwich, N. Y., is now being sent monthly by Eaton Laboratories to thousands of physicians throughout the country. The "Notebook" reads like a physician's Elbert Hubbard Scrapbook: it discusses anything and everything that might be of interest to a doctor—informally, philosophically and authoritatively—and reports to the doctor on some of the problems a professional pharmaceutical industry faces.

In the first issue, Dr. MacLeod ranges from medicine in the Confederacy 100 years ago, and the unusual way French doctors report on clinical research, to the psychosomatic aspects of urethritis, the "seventh venereal disease," and, at the end, "Nitrofuran Notes." The "Notes" are short, pointed, easy-to-read excerpts from journal articles on research with the nitrofurans.

IF YOUR PATIENT WANTS TO DRINK THAT'S HIS BUSINESS IF HE WANTS TO QUIT that's our BUSINESS

BRIGHTON HOSPITAL, now in operation for over 2 years, wishes to thank the physicians of Michigan and Ontario for the good reception and the confidence given to us.

We know that today's physician recognizes the many-sided nature of the disease—Alcoholism. Beyond the physical, which requires expert treatment in itself, the alcoholic's physician is plagued, we know, with the equally vital aspects, which make demands on his time and attention, of the emotional, spiritual and mental sickness he notes in his patient.

We believe that Brighton Hospital offers the answer. Physicians can now send their alcoholic patients to Brighton with the certain assurance that they will find expert medical and nursing attention AND that, if they so desire, patients will be thoroughly indoctrinated with the program of Alcoholics Anonymous.

BRIGHTON HOSPITAL is NOT interested in the patient who merely wishes to be dried out in order to resume drinking. We ARE interested in those patients who really, fervently, seek complete rehabilitation and a way of life FREED from alcohol.

BRIGHTON HOSPITAL is owned and operated by MICHIGAN ALCOHOLIC REHABILITATION FOUNDATION, a non-profit organization devoted to the best possible hospitalization of the alcoholic who seeks to stop drinking.

DOCTORS, we are here to serve you. We are here to serve your patients.

BRIGHTON HOSPITAL

12851 East Grand River Avenue **Brighton, Michigan** **Phone: Brighton Academy 7-1211**

The next licensure examination of the Michigan State Board of Registration in Medicine will be held in Lansing on October 10, 11, and 12. Applications are to be filed with the Secretary of the Board at 118 Stevens T. Mason Building, Lansing.

* * *

The American Rhinologic Society will hold its annual meeting in Chicago, October 9-13.

The first evening will be devoted to a business session. A series of surgical demonstrations and seminars will be presented in the Illinois Masonic Hospital from 8 a.m. to 10 p.m. on the three following days. These will cover many phases of rhinology and will be conducted under the direction of Dr. Maurice H. Cottle, professor and chairman of the department of otolaryngology, Chicago Medical School.

The annual scientific program will be presented in the Palmer House on the closing day. This will include a morning symposium on "Expanding Horizons in Rhinology," with the following participants: Charles J. Petrille, M.D., New Haven; Norman D. Fischer, M.D., Chapel Hill; Harold S. Ulvestod M.D., Minneapolis; and French K. Hensel, M.D., St. Louis. Guest speakers at the afternoon program will be: Roy S. Griber, M.D., Chicago; Conrad Pirani, M.D., Chicago; and Hubert R. Catchpole, M.D., Chicago. Matthew S. Ersner, M.D., Philadelphia, will be the banquet speaker with President Ralph H. Riggs, M.D., acting as toastmaster. The profession is invited as guests of members.

Further information may be had by writing to Mrs. Mabel Campbell, corresponding secretary, 834 Wellington Avenue, Chicago 14, Illinois.

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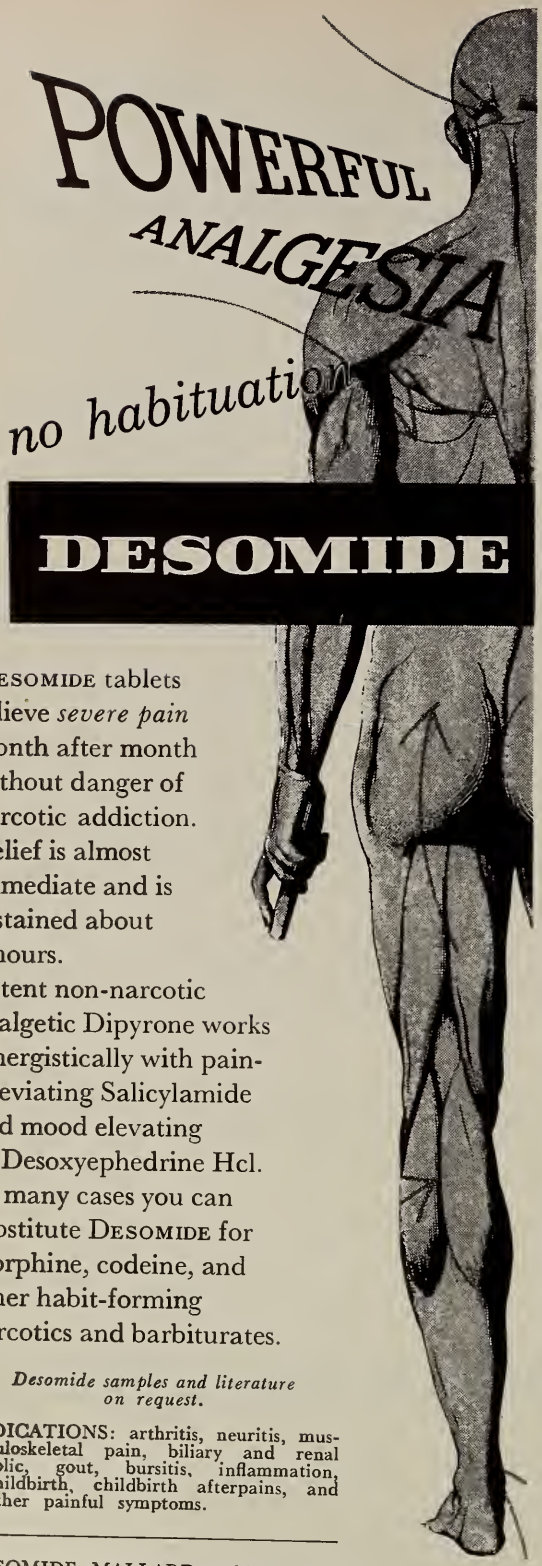
Michigan Blue Cross-Blue Shield enrollment will be open to the general public this year from September 10 through 22. This is the only period of the year during which Blue Cross-Blue Shield coverage can be obtained by individuals and families who cannot enroll through employee, farm or professional groups.

The Blue Cross-Blue Shield Non-Group plan offers far and away the best coverage available for the price, on an individual enrollment basis. For example, the maximum daily hospital room allowance is $12. The program provides 30 days of hospital care for each family member covered, with another thirty days available each time the member has been out of the hospital at least six months.

Maternity benefits—subject, of course, to the usual nine-month wait from the effective date of the contract—are exactly the same as for any other admission, plus routine nursery care for the newborn.

Blue Shield's Non-Group Plan benefits are the same as for its Group—$2,500 Family Income certificate except there is a six-month waiting period for T&A's for dependent children and conditions existing at the time the contract becomes effective.

As in previous years, Blue Shield recognizes that the doctors of Michigan, by providing information to their patients, contribute immeasurably to the success of the No-Group campaign. To this end, an initial supply



DESOMIDE tablets relieve *severe pain* month after month without danger of narcotic addiction. Relief is almost immediate and is sustained about 7 hours.

Potent non-narcotic analgetic Dipyrone works synergistically with pain-alleviating Salicylamide and mood elevating dl-Desoxyephedrine Hcl. In many cases you can substitute DESOMIDE for morphine, codeine, and other habit-forming narcotics and barbiturates.

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of descriptive folders and application cards, with a container, has been supplied with the request that the material be given a prominent place in each physician's waiting room or on his desk. Additional quantities are available on request.

* * *

American Board of Obstetrics and Gynecology.—Applications for certification for the 1957 Part I examinations are now being accepted. Candidates making new application or requesting the reopening of an application must do so before October 1, 1956. Applications are to be accompanied by a list of hospital admissions as outlined in the current Bulletin of the Board.

The next scheduled examination (Part I), written, and review of case histories for all candidates will be held in various cities of the United States, Canada, and military centers outside the Continental United States, on Friday, February 1, 1957.

Current Bulletins are now available and may be obtained by writing to Robert L. Faulkner, M.D., Secretary, 2105 Adelbert Road, Cleveland 6, Ohio.

* * *

Fiske Essay on Infertility.—The Trustees of America's oldest medical essay competition, the Caleb Fiske Prize of the Rhode Island Medical Society, announce as the subject for this year's dissertation "The Present Day Treatment of Infertility." The dissertation must be typewritten, double spaced, and should not exceed 10,000 words. A cash prize of $350 is offered. Essays must be submitted by January 10, 1957.

For complete information regarding the regulations, write to the Secretary, Caleb Fiske Fund, Rhode Island Medical Society, 106 Francis Street, Providence 3, Rhode Island.

* * *

A new cabin at Camp Blodgett on Lake Michigan was dedicated recently to Dr. David B. Hagerman, of Grand Rapids, for his long, continuous and dedicated, service to the camp. Known as the Hagerman cabin, the building commemorates Dr. Hagerman's twenty-two years as a member of the board of directors and for his donation of medical services.

The new cabin will accommodate twenty-eight needy campers from Grand Rapids who are selected by the Community Chest. The campers attend three-week sessions. The camp, founded in 1921, is co-sponsored by the Community Chest and by Babies Welfare Guild which is in charge of capital improvements.

* * *

Michigan Allergy Society officers for the current year are: Kenneth P. Mathews, M.D., Ann Arbor, president; E. Oskar Schreiber, M.D., Flint, vice president; Bernard Dickstein, M.D., Flint, secretary-treasurer. The executive committee is composed of these three officers plus Henry D. Beale, M.D., Toledo; Sidney Friedlaender, M.D., and Joseph H. Shaffer, M.D., Detroit.

* * *

University of Michigan Medical School will sponsor a Symposium on Endocrines and Nutrition, October 11-12, 1956, in the Amphitheatre, Horace H. Rackham School of Graduate Studies, Ann Arbor. For program, write Dr. Frank H. Bethell, Simpson Memorial Institute for Medical Research, Ann Arbor, Michigan.

Say you saw it in the Journal of the Michigan State Medical Society

1957 MCI. Daniel W. Myers, M.D., Detroit, has been appointed chairman of the Colored Television Program for the 1957 Michigan Clinical Institute.

This colored television program (Smith, Kline & French Laboratories) will emanate from the Grace Hospital and be beamed into the Grand Ballroom of the Sheraton-Cadillac Hotel, between the hours of 11:30 a.m. to 1:30 p.m. on each of the three days of the MCI—March 13-14-15.

W. M. LeFevre, M.D., of Muskegon, is chairman of the over-all Program Committee for the 1957 MCI.

Otto O. Beck, M.D., Birmingham, is General Chairman of Arrangements for next year's Institute.

Brief History of the Caduceus. In Greek Mythology, Apollo, the sun god, carried a staff or wand which exercised influence over the living and the dead. Apollo was not only a great athlete but also god of the healing art. According to fable, Apollo gave his staff to Mercury in return for the honor of inventing the lyre. As Mercury entered Arcadia with this wand in his hand he saw two serpents fighting; he threw the staff between them, and they immediately wound themselves around it in friendly union.

Aesculapius, Apollo's son, was the legendary Greek god of medicine. When Aesculapius was treating a patient one day, a snake appeared and entwined about his walking stick, thus conferring on him the gift of wisdom and establishing the staff of Aesculapius as the classical symbol of medicine.

The caduceus of Mercury first became associated with medicine in the 16th century. Sir William Butts, physician to Henry VIII, was the first to employ the caduceus on his chest. In 1902 the caduceus was adopted as the insignia for the medical officers of the U. S. Army. It also is used as the insignia of the Dental Corps, Veterinary Corps, Army Nurse Corps, and Sanitary Corps.

British physicians long ago dropped the winged caduceus. The Royal Army Medical Corps, for example, pledges allegiance to Aesculapius' staff. The caduceus also seems to be losing out in the United States. The new insigne of the Air Force Medical Service physicians is a stripped-down staff of Aesculapius; the U. S. Public Health Service also had dropped the single-serpent device.

* * *

Clare L. Straith, M.D., Detroit, Michigan, will appear on the program of the Interstate Postgraduate Medical Association of North America, Cleveland, Ohio, October 22-25, 1956. The meetings will be held at Municipal Auditorium. For program, write Interstate PG Medical Association, Box 1109, Madison 1, Wisconsin.



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1. Pollock, B. E., and Pruitt, F. W.: Am. J. M. Sc., 226:172, 1953.

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Dues and Special Assessments of component medical societies of Michigan. The following figures recently were certified by component societies of Michigan as their local per member dues:

Allegan	$18.00 plus $100.00 assessment
Alpena-Alcona-Presque Isle	10.00
Barry	40.00
Bay-Arenac-Iosco	30.00
Berrien	5.00
Branch	30.00
Calhoun	10.00
Cass	None
Chippewa-Mackinac	15.00 and assessment of $10.00
Clinton	10.00
Delta-Schoolcraft	30.00
Dickinson-Iron	
Eaton	20.00
Genesse	No dues —no assessment
Gogebic	10.00
Grand Traverse-Leelanau-Benzie	13.00 —no assessment
Gratiot-Isabella-Clare	3.00 —special assessment only when necessary
Hillsdale	15.00
Houghton-Baraga-Keweenaw	10.00
Huron	55.00
Ingham	10.00
Ionia-Montcalm	30.00 (includes meals)
Jackson	13.00 —no assessment
Kalamazoo	55.00
Kent	10.00 —no assessment
Lapeer	10.00
Lenawee	40.00
Livingston	16.00 —no assessment
Luce	None
Macomb	23.00 —no assessment
Manistee	15.00
Marquette-Alger	8.00
Mason	5.00
Mecosta-Osceola-Lake	95.00 (plus local assessment of $20.00)
Menominee	20.00 —no assessment
Midland	20.00
Monroe	10.00
Muskegon	45.00
Newaygo	45.00
North Central	10.00
Northern Michigan	5.00
Oakland	20.00
Oceana	
Ontonagon	None
Ottawa	30.00
Saginaw	20.00
St. Clair	6.00
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Oswald Nakas, M.D.	Edwardsburg	July 1	Buchanan
Thomas Leider, M.D.	Ovid	July 15	Chicago
Harrison C. Visscher, M.D.	Fennville	July 1	Grand Rapids
Russell Smith, M.D.	Whitmore Lake	July	Rockford, Illinois
Assisted By Michigan Health Council:			
Clyde P. Davenport, M.D.	Saginaw	July 1	Internship
Peter J. Verkaik, M.D.	Hudsonville	July 1	Grand Rapids
John W. Kavanaugh, M.D.	Kalamazoo	July 1	Detroit
Richard Coak, M.D.	Tecumseh	July 1	Toledo, Ohio
Henry Gall, M.D.	Detroit	July 1	Brooklyn, New York
Richard T. Mellis, M.D.	Kalamazoo	July 1	St. Louis, Mo.
Robert F. Landstra, M.D.	Grand Rapids	July 1	Florida
F. L. Clement, M.D.	Kalamazoo	July	Cleveland, Ohio

MEDICAL TELEVISION SHOWS

Produced by Michigan Health Council

Date	*Station*	*Subject*	*Guests*
July 1, 1956	WJBK-TV, Detroit	Fire and Your Hospital	A Film
July 3, 1956	*WKAR-TV, East Lansing*	Volunteer Bureau	Mrs. Joseph Stack, Lansing A Film
July 8, 1956	WJBK-TV, Detroit	Guard Your Heart	C. Robert Dean, M.D., Detroit
July 15, 1956	WJBK-TV, Detroit	Rehabilitation Institute	Russell S. Blanchard, M.D., Detroit Film—A Citizen Participates
July 22, 1956	WJBK-TV, Detroit	M.D. Placement	Film—Johnny's New World
July 29, 1956	WJBK-TV, Detroit	Vision	Film—Magic in the Seeing



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In addition to the 2,000,000 diabetics now in the United States, 3,000,000 persons will develop diabetes sometime during their lives, according to the American Diabetes Association.

* * *

It would seem to be elementary that, if a patient with an acute lower respiratory infection were ill enough to require hospitalization, an initial diagnostic chest x-ray would be mandatory, and that for pneumonias, additional progress films would be in order.—C. Wesley Eisele, M.D., Vergil N. Slee, M.D., and Robert G. Hoffmann, Ph.D., Ann. Int. Med., Jan.. 1956.

* * *

The 1956 Upper Peninsula Medical Society meeting in Sault Ste. Marie, June 22-23, chalked up a total attendance of 216, including ninety-four doctors of medicine. The Michigan Medical Assistants Society organized an Upper Peninsula Section, with forty-four representatives in attendance.

* * *

Endocrinology and Metabolism. The Eighth Annual Postgraduate Assembly of the Endocrine Society will be held at Texas Medical Center in Houston, October 22-27, 1956. An excellent program has been arranged. For program and full information write J. B. Trunnell, M.D., Chairman, M. D. Anderson Hospital and Tumor Institute, Houston 25, Texas.

* * *

The Fall Postgraduate Clinic of the Michigan Academy of General Practice will be held November 6-8, 1956, at the Sheraton-Cadillac Hotel, Detroit. This Tenth Annual Clinic will feature twenty nationally known clinical teachers participating in symposia on (a) pediatrics, (b) obstetrics and gynecology, (c) cholesterol, (d) cardio-vascular diseases, (e) new tranquilizers, and (f) internal medicine. The annual banquet is scheduled for Wednesday, November 7, at 6:00 p.m. All members of the Michigan State Medical Society are cordially invited to attend the Clinic.

* * *

What Does the "Blue Shield" Mean to You? Have you ever stopped to ask yourself, doctor, why some 37 million Americans have enrolled in Blue Shield, the medical profession's own approved prepayment program in a little more than ten years' time?

Blue Shield and its companion Blue Cross have accomplished the most stupendous enrollment of any insurance program ever offered the American people—at a minimum of expense and by relatively "low pressure" sales methods. This accomplishment has been possible because there is now an almost universal desire for protection against the costs of unpredictable illness. The chief reason why so many people have chosen Blue Shield is that they know it is recommended and supported by the medical profession, and most people have confidence in the nation's doctors.

By the same token, more Americans have chosen Blue Cross than any other hospital insurance program because Blue Cross is sponsored by the hospitals, and

(Continued on Page 1136)

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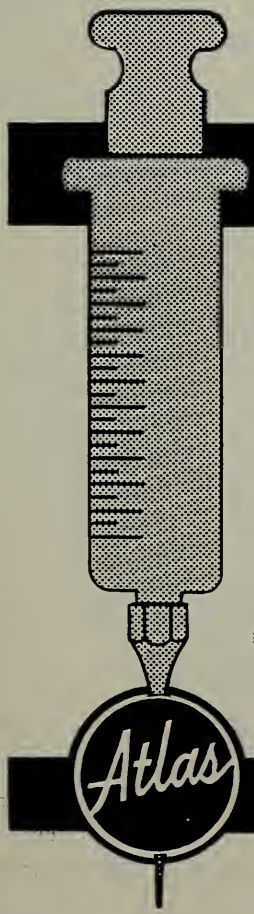
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(Continued from Page 1134)

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THE ACADEMY OF PSYCHOSOMATIC MEDICINE

The Academy of Psychosomatic Medicine will hold its third annual meeting at the Hotel Plaza, New York City on Thursday, Friday, and Saturday, October 4, 5, and 6, 1956. Just as the first annual program was devoted to the Psychosomatic Aspects of Surgery, and the second to the Psychosomatic Aspects of Drug Administration, the third will be key-noted around the subject of the Psychosomatic Aspects of the General Practice of Medicine.

Including all panelists, there will be a total of forty-four speakers who will cover every facet of Psychosomatic Medicine as encountered in both general and specialty practice.

The meeting is open to all Fellows, Associate Fellows, their guests, and interested physicians. There is no registration fee. For details concerning the program and the speakers, questions should be directed to the office of the Secretary, Dr. Ethan Allan Brown. 75 Bay State Road, Boston 15, Massachusetts.

"...in patients with moderately severe and severe cardiac failure, neohydrin is the oral diuretic of choice."*

*Moyer, J. H., and others: J. Chronic Dis. 2:670, 1955.

03056

THE OPEN AIRWAY

(Continued from Page 1086)

ent motion. There is no pulse, no heart sounds, and only by direct vision or an electrocardiogram can the diagnosis be made and the condition be differentiated from a complete cardiac arrest. The heart distends and becomes very cyanotic and, except for the fibrillating muscle, appears like the heart in complete arrest. Manual compression of the heart is essential for oxygenation of the heart and brain, and when the heart muscle is well oxygenated the defibrillator should then be used. The animal laboratory is the place to acquaint the house and attending staffs with the technique and dangers of this instrument, as well as the realization that it may take time and effort to accomplish defibrillation.

Cardiac resuscitation is only possible if one is able to recognize a cardiac arrest and institute a bold, well organized plan. The animal laboratory is invaluable in this training program, and the lessons learned here may save many lives. Aseptic and careful surgical technique undoubtedly will aid in the recovery of the animal.

The most important lesson to be learned from such a demonstration and study, both for the anesthetist and surgeon, is the realization of the importance of an open airway and the free exchange of gases in the prevention of cardiac arrest and ventricular fibrillation.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

POLIOMYELITIS. By W. Ritchie Russell, C.B.E., M.D. (Edin.), D.Sc. (Oxon), F.R.C.P. (Edin.), F.R.C.P. (Lond.); Director, Department of Neurology, United Oxford Hospitals; Clinical Lecturer in Neurology, University of Oxford; and Clinical Neurologist to the Army. Second Edition. London: Edward Arnold (Publishers) Ltd. Price $3.00.

This concise 140 page manual is an excellent review of the diagnosis and treatment of poliomyelitis, with emphasis on British methods. It is outdated and not too helpful for the American physician.

R.S.

TEXTBOOK OF UROLOGY. By Victor F. Marshall, M.D., F.A.C.S., Associate Professor of Clinical Surgery (Urology), Cornell University Medical College; Attending Surgeon-in-Charge, Urology, James Buchanan Brady Foundation of the New York Hospital; and Associate Attending Urologist, the Memorial Center for Cancer and Allied Diseases, New York City. New York: Hoeber-Harper. Price $5.00.

This textbook of urology is of real value to the general practitioner and medical student. This reviewer is especially pleased with it and can recall no text on urology, since the publication of Dr. Hugh Young's two volume work, where the importance of obstruction and infection are so stressed. Obstruction must be removed before the control of infection is possible.

In the format of the book he wisely puts the subject matter of each paragraph in italics, and the schematic drawings emphasize and clarify the words of the text.

Evaluation of the whole patient is stressed along with a complete genitourinary work-up where urologic disease is suspected. For conditions with symptoms referable to deep-seated urologic pathology, the reasons for a complete urologic work-up are explained. The type of instrumentation or surgery is advised without an attempt to detail the steps of the many intricate manuevers necessary in urologic surgery.

HUNTERDON MEDICAL CENTER. The Story of One Approach to Rural Medical Care. By Ray E. Trussell. Published for the Commonwealth Fund by Harvard University Press, Cambridge, Massachusetts, 1956.

Hunterdon County is a rural area of 435 square miles with a population of 2,800 in western New Jersey, which at the end of World War II, attempted to secure adequate medical and health care. Advice from the county medical society, New York University, and Bellevue Medical Center, eventuated in the Hunterdon Medical Center after several years of planning and money raising, and the construction of a building to put on an elaborate program.

The story is told in great detail and makes interesting reading. The Commonwealth Fund participated in the creative and publishing activities.

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ANESTHESIA FOR OBSTETRICS. Labor—Delivery—Infant Care. By Robert A. Hingson, Professor of Anesthesia, Western Reserve University, and Director of Anesthesia, University Hospitals of Cleveland; and Louis M. Hellman, Professor of Obstetrics and Gynecology, State University of New York, College of Medicine at New York, and Director of Obstetrics and Gynecology, Kings County Hospital, New York. Philadelphia and Montreal: J. B. Lippincott Company. Price $12.50.

This is a well written text on anesthesia and analgesia as applied to obstetrics. The physical appearance of the book is exceptionally inviting, with gloss paper, large, clear type, distinct drawings and sketches, and many documented graphs and charts, and a few beautiful color plates.

Each analgesic and anesthetic agent is discussed as to its pharmacology, physiologic effect, dangers, antidote, and proper method of use. There are several chapters devoted to the anatomy of the pelvis, anatomy of the circulation in the fetus, physiology of labor, and complications in pregnancy and labor. The relationship of these to the sedatives and anesthestics to be used is effectively explained.

The final chapter takes up the organization of the obstetric anesthetic service on a twenty-four-hour basis in hospitals of several sizes and types.

Because the writing is clear and concise, the book can be a source of requent reference by either anesthetists or obstetricians.

S.L.

THE ROCHESTER REGIONAL HOSPITAL COUNCIL. Leonard S. Rosenfeld, M.D., M.P.H., and Henry B. Makover, M.D. Published for The Commonwealth Fund by Harvard University Press, Cambridge, Massachusetts, 1956. Price $3.50.

The Rochester Regional Hospital Council is the story of work performed under the Commonwealth Fund, extending over a period of almost twenty-five years, in studying the effects of suitable rural hospitals in increasing the medical and health care of rural communities. The Fund helped build fourteen hospitals removed from metropolitan centers. The Hill-Burton Act in 1948 terminated the necessity of continuing construction by making funds available.

This book is a report of a survey of the project, the establishment of the Council, selection of the area, the program of education and the conclusion. The work was successful in that the standard of health was much improved.

HUMAN OVULATION AND FERTILITY. Edmond J. Farris, Ph.D., Executive Director, Associate Member, the Wistar Institute of Anatomy and Biology. Philadelphia & Montreal: J. B. Lippincott Company, 1956. Price $6.50.

This book is a summary of observations by the author concerning ovulation and its relations to fertility.

It opens with a description of the rat hyperemia test, to determine the presence of and the time of ovulation. The test seems to be more accurate than previous methods, although it requires specific circumstances, specific materials, and trained personnel for reading the results.

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Based on his own extensive studies and the clinical work of others with this test, the author has formulated a new method for figuring and therefore a new plan for selecting the optimum time of conception. With this ability to determine the time of ovulation, he has revised the advice to couples on the control of conception.

The book, being a compilation of data and conclusions from the rat hyperemia test to determine ovulation time, is a source of information, both corroborative and new. It is not a reference book. It is well composed, has many charts and graphs, and the statements are well documented.

S.T.L.

THE MORPHOLOGY OF HUMAN BLOOD CELLS. By L. W. Diggs, M.A., M.D., Professor of Medicine and Director of Medical Laboratories, University of Tennessee and City of Memphis Hospitals; Consultant in Hematology, Armed Forces Institute of Pathology, Washington, D. C.; Dorothy Sturm, Instructor, Memphis Academy of Arts; and Ann Bell, B.A., Instructor in Medicine, University of Tennessee. Philadelphia and London: W. B. Saunders Company, 1956. Price $12.00.

This book, as the title indicates, is an atlas devoted to the description of various blood cells and enters but little further than that in the broad field of hematology. It should prove useful to the laboratory technician, all students of hematology, and to those clinicians who wish to check their own stained blood films. Many of the colored drawings have previously appeared in a brochure

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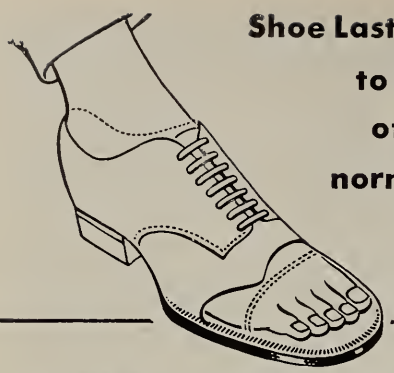
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Surgical Anatomy and Clinical Surgery, two weeks, October 1
Surgery of Colon and Rectum, one week, October 15
General Surgery, one week, October 22
Thoracic Surgery, one week, October 1
Esophageal Surgery, one week, September 24
Breast and Thyroid Surgery, one week, October 22
Gallbladder Surgery, three days, October 29
Fractures and Traumatic Surgery, two weeks, October 15

GYNECOLOGY AND OBSTETRICS—Obstetrics and Gynecology, three weeks, October 22
Vaginal Approach to Pelvic Surgery, one week, October 15

MEDICINE—Electrocardiography and Heart Disease, two-week basic course, October 8; one week advanced course, September 17
Internal Medicine, two weeks, September 24
Gastroenterology, two weeks, October 22
Dermatology, two weeks, October 15
Cardiology (Pediatric), two weeks, November 5

RADIOLOGY—Diagnastic X-ray, two weeks, November 26
Clinical Uses of Radioisotopes, two weeks, October 8

UROLOGY—Two-week course, October 8
Cystoscopy, ten days, by appointment

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circularized to the profession by a pharmaceutical firm two years ago. The art work, as in many similar atlases, portrays cells with a sharp and bright color deliniation and not as they appear through the ocular of the microscope. It must be assumed that this is done for the purpose of teaching the characteristic general features of such a cell, as the colored photomicrographs only bring out the individual traits of that particular cell. The other illustrations and the brief text are good. The portions of the book devoted to the L.E. cell phenomenon and to the megakaryocytes are current and excellent. The eleven page chapter on techniques and methods is basic but a very thoughtful inclusion.

A.A.H.

RHEUMATIC FEVER PROPHYLAXIS

(Continued from Page 1119)

Medical Society Rheumatic Fever Control Committee is attempting to arrive at a program to permit such substitution, but as yet has been unable to agree on a workable solution.

3. "Must the invoice vouchers be returned for payment within ninety days of the last service?" The Afflicted Children's Act states "Payment shall be refused on any billing rendered ninety days or more after the discharge of the patient from the hospital."

With regard to the prophylaxis program, it is almost imperative that billing be made *immediately* after the last treatment authorized in order that authorization for the next treatment will have been received in the intervening month, since payment for service before the date such service is authorized cannot be made under any circumstances.

4. "I saw a patient twice and last gave him benzathine penicillin G three months ago. I understand that he has moved to another locality. What procedure is to be followed?"

Complete your invoice voucher for the service rendered and send it in for payment along with a note that patient has moved giving new address if known. The doctor at the new address should write the Michigan Crippled Children Commission giving identifying data and asking for authorization to continue prophylaxis. Do not send the invoice voucher made for your signature to the other physician; he must be furnished one for his signature. If you do not know where the patient moved, we will ask the Health Department to locate him.

THE JOURNAL
of the Michigan State Medical Society

VOLUME 55 OCTOBER, 1956 NUMBER 10

Contributors to This Issue



Wm. M. LeFevre, M.D.



C. H. Ross, M.D.



H. C. Saltzstein, M.D.

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THE JOURNAL
of the Michigan State Medical Society

VOLUME 55 OCTOBER, 1956 NUMBER 10

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Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 14, Minnesota.

Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, $6.00; single copies, 60 cents. Additional postage; Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year.

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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of August 22, 1956

- **Development of a resolution** marking the passing of J. Joseph Herbert, MSMS Legal Counsel, who died in his sleep July 28, 1956, was referred to a special committee (L. Fernald Foster, M.D., W. B. Harm, M.D., and Mr. H. W. Brenneman) to draft, with copies to be forwarded to Mr. Herbert's family.
- **Governor's Study Commission on Prepaid Hospital Care Plans.**—A statement on the position of the Michigan State Medical Society toward the proposed study to be made by the Governor's Commission was approved and ordered sent to the Governor's Study Commission, with copies to Governor G. Mennen Williams, to each individual member of his Commission, and to Michigan Hospital Service and Michigan Medical Service.
- **Councilor Conferences.**—The chairman reported that nine conferences had been held by Councilors in their districts, prior to this date; and that four additional conferences were scheduled.
- **The dates of January 25-26-27, 1957,** were assigned for the annual County Secretaries Public Relations Seminar, to be held in Detroit.
- **H. Waldo Bird, M.D.,** Ann Arbor, was chosen as chairman of a Special Committee to Study Care of the Mentally Disturbed (to obviate longtime hospitalization). Other members of the committee are J. T. Ferguson, M.D., of Traverse City, and A. H. Hirschfeld, M.D., of Detroit.
- **The Council Chairman and the new President-Elect,** to be selected September 25, were appointed as MSMS representatives to the Annual Convention of the Woman's Auxiliary, held in Detroit September 25-26-27.
- **Ralph W. Shook, M.D.,** of Kalamazoo, was appointed as official MSMS representative to attend the 1956 convention of the Michigan State Medical Assistants Society held in Detroit in September.
- **Wm. M. LeFevre, M.D., Muskegon, and R. L. Mainwaring, M.D., Allen Park,** were appointed as MSMS representatives to the American Association of Blood Banks
- **President W. S. Jones, M.D.,** Menominee, presented an invitation from the Economic Club of Detroit to have MSMS representatives appear on that Club's program to discuss current problems facing the medical profession.
- **Dr. Lawrence R. Hafstad,** Vice President in Charge of Research Staff, General Motors Corporation, was announced by President Jones as the 1956 Biddle Lecturer. His subject will be "The Future of Atomic Energy and Medicine." President Jones also announced he had been appointed to the Governor's Study Commission on Public Health.
- **President-Elect Arch Walls, M.D.,** of Detroit, reported he had forwarded to Bruce Publishing Company the personnel of the 1956-57 MSMS Committees.
- Report was presented on MSMS employes' service which in years represented, to August 1, 1956, a total of 130 years and 7 months!
- **Chairman D. Bruce Wiley, M.D.,** of Utica, was authorized to appoint a Committee of MSMS representatives to meet with the National Committee on Educational Problems and Teacher Certification Code.
- **IBM Membership Card.**—Sample of the various items of historical information, for inclusion on the IBM Membership card to be utilized by MSMS as of January 1, 1957, was presented and approved.
- **Officers' Night Banquet.**—The detailed program of Officers' Night, including the Banquet, was presented by the Committee on Arrangements and approved.
- **Committee Reports.**—The following were reviewed: (a) Traffic Safety Committee, meeting of July 26; (b) Courses in Medical Economics and Ethics Committee, meeting of August 10; (c) Special Committee on Healing Arts, August 19; (d) MEG Committee. Councilors' comments re proposed changes in MSMS By-Laws covering mediation, ethics, and grievance were noted and ordered referred to the MEG Committee.
- **Medical Advisory Committee to Michigan Hospital Service.**—John W. Paynter, President of MHS, presented in person a request that MSMS reactivate its Medical Advisory Committee to Michigan Hospital Service. This request was approved and the appointment was referred to Chairman Wiley.
- **Medical Care of Servicemen's Dependents.**—President Jones, President-Elect Walls, and Mr. Jay C. Ketchum, Executive Vice President of Michigan Medical Service, reported on the July 28-29 AMA-sponsored meeting in Chicago, held to discuss medical care of servicemen's dependents, following enactment of recent federal legislation. The Council reactivated the MSMS Committee on Uniform Fee Schedules for Governmental Agencies and requested Mr. Ketchum to effect, in his negotiations with the federal agencies, an equitable contract for medical care of servicemen's dependents in this state.

(Continued on Page 1152)

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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1150)

- **Future Expansion of Michigan State Medical Society.**—President Jones commented on the present MSMS headquarters at 606 Townsend Street, Lansing, which are barely adequate, and felt that future expansion would necessitate soon a larger and better functioning executive office building; he recommended the purchase of a generous-sized piece of property for future use of MSMS. A committee was appointed to investigate the purchase of an adequate site for MSMS for its future necessary expansion.
- **Public Relations Counsel's report** included (a) plans for the state fair exhibit, (b) publicity program for MSMS Annual Session, (c) expansion of "Medical Horizons" program on additional TV stations in Michigan, and (d) resignation of Field Secretary A. DeWitt Brewer and formation of a committee to employ a successor.

NEW MEDICARE PROGRAM

Congress recently passed Public Law 569, known as the Medicare Act, to provide medical and surgical care not formerly available to servicemen's dependents (who could not utilize exisiting military installation facilities). These dependents may now be treated, at government expense, by civilian physicians.

This $76 million military dependents' medical care act was discussed at an AMA-sponsored conference in Chicago, July 28-29, by state medical society representatives and those from the Department of Defense; all were impressed with the representatives of the federal agency who were most desirous to co-operate with the special medical advisory committee.

The following key conclusions were reached at the Chicago conference:

1. Fees will not be set on a national level, but will be set by each state (or even county) medical society.
2. The Department of Defense will accept any reasonable fee.
3. Doctors of medicine must accept the established fee without an additional charge.
4. Fee conflicts will be arbitrated by a local physician grievance committee.
5. The government will not pay for elective procedures or for treatment of chronic illness.
6. The program will be launched December 8.

The MSMS Council has appointed Michigan Medical Service as its negotiating and fiscal agent, with its Executive Vice President, Jay C. Ketchum, as the contact man.

The Special Medical Advisory Committee developed eight drafts of the regulations to implement the Medicare Act. As soon as Draft 8 of the implementing directions is approved by the Department of Defense, copies will be made available by the AMA to state societies, and MSMS in turn will advise all its fifty-five component societies. Some time thereafter a supplementing set of regulations will be issued jointly by the Department of the Army, Navy, Air Force, and Public Health Service to amplify and detail the operational implementation of the DOD directive, and copies of these will be sent by AMA to the states and in turn by MSMS to its components.

Medicine's representatives will be continuing their contact with the appropriate government agencies as these developments occur, and in like manner, Michigan Medical Service will continue its efforts in behalf of the medical profession of Michigan and the people whom they serve.

REGISTRANTS FROM MANY COMMUNITIES AT 1956 MCI

A total of 167 separate Michigan communities were represented at the 1956 MCI, held in Detroit, March 7-9, 1956. The largest registration came from Detroit with 652. Flint came in second with seventy-five; Lansing had an attendance of forty-seven and Ann Arbor was in fourth place with forty-six. Dearborn had a registration of thirty-six followed by Saginaw with thirty-three and Pontiac with twenty-five. Grand Rapids registered twenty-four, Battle Creek sent seventeen and Kalamazoo fifteen.

The registration by specialties put General Practice in the lead, as in previous years.

Ninety-three M.D.'s came from other states and countries, including forty-five from Canada and twenty-three from Ohio. Other states represented were Alabama, California, Illinois, Indiana, Louisiana, Massachusetts, Minnesota, New York, New Jersey, North Carolina and Wisconsin. One representative came from Italy!

MEDICAL TELEVISION SHOWS

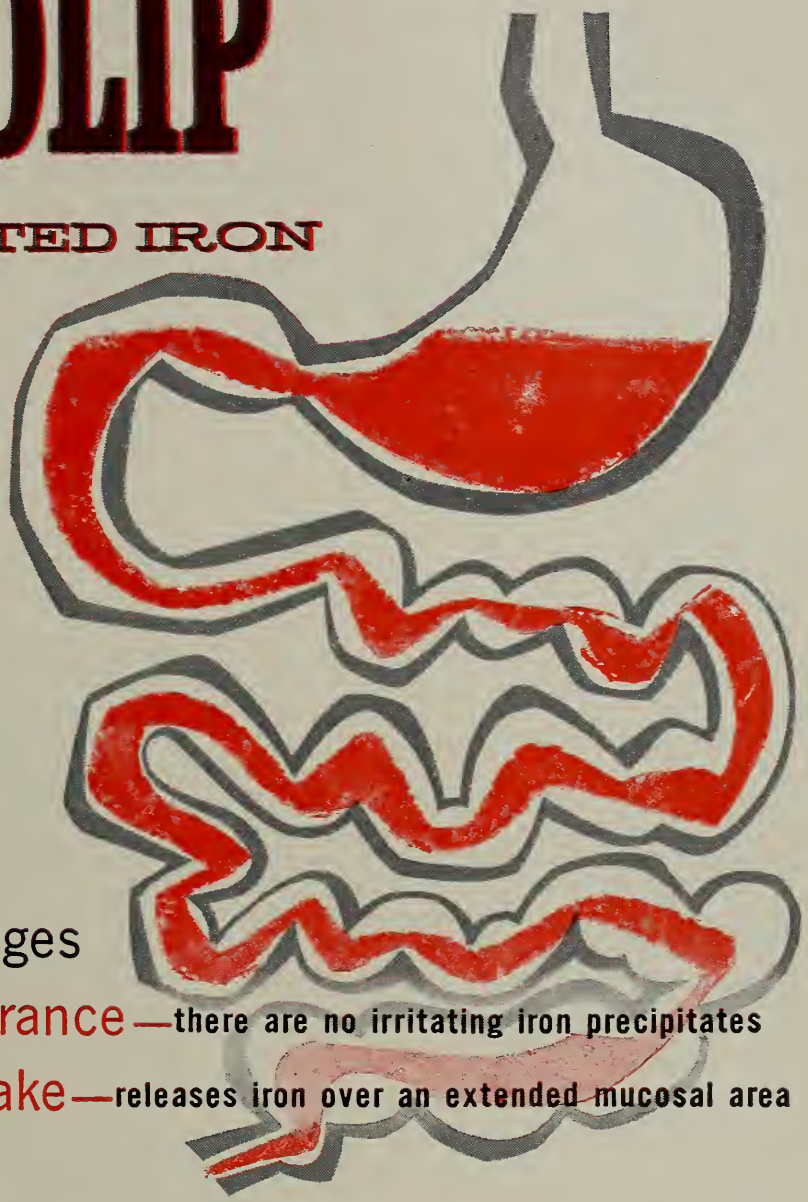
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Date	Station	Subject	Guests
Aug. 5, 1956	WJBK-TV, Detroit	To Save a Life	A Film
Aug. 12, 1956	WJBK-TV, Detroit	Water Safety (Learning How to Swim)	A Film
Aug. 19, 1956	WJBK-TV, Detroit	Physical Check-Ups	A Film
Aug. 26, 1956	WJBK-TV, Detroit	Operation Costs ("Operation Herbert")	A Film
Aug. 28, 1956	WKAR-TV, East Lansing	Commercial Polio Vaccine	F. S. Leeder, M.D., Lansing John Butts, Lansing

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Cancer Comment

THE AMERICAN CANCER SOCIETY'S SUPPORT OF RESEARCH

By Harry M. Weaver

Administrator for Research of the American Cancer Society

The support of research by the American Cancer Society—in the more immediate sense an expression of confidence, sustained by evident progress, in the manifold capabilities of the scientists who receive funds to exploit their ideas for research on the cancer problem—exemplifies our best hope for the eventual conquest of this disease.

From a relatively small beginning in 1945, there has been a steady and rapid growth to the present in the magnitude of the support of cancer research. The combined financial outlay by the national cancer fund-granting agencies has grown from less than $1,000,000 in 1945 to approximately $50,000,000 in 1956. With this rapid growth in the underwriting of cancer research has come a commensurate intensification of the attack along certain lines and the beginning of explorations into areas as yet relatively untouched.

In 1954, the Board of Directors of the American Cancer Society, recognizing the improving climate for cancer research, created an independent committee (called the Research Policy Survey Committee) of distinguished scientists, physicians, and administrators to make an exhaustive study of the effectiveness of the Society's policies and administrative machinery for research. This action by the board was not an expression of dissatisfaction with the productivity of the existing program of cancer research, but rather an effort to make sure that the society was geared to meet a new challenge—a challenge arising from the fact that with increased support of research it was becoming possible for the first time to award funds commensurate with the true needs of the research that remains to be done.

The report of the Research Policy Survey Committee, published *in extenso* elsewhere,* is "a refreshingly realistic look at the requirements for successful scientific exploration."** The report as a whole and all of the contained recommendations have been adopted officially by the American Cancer Society. The recommendations for change are now in the process of being carried out.

In brief, the committee in formulating its recommendations took cognizance of the pivotal importance of the imaginative scientist working in an intellectually stimulating atmosphere. The awarding of grants is viewed, in the perspective of the American Cancer Society, as a means for exploiting worthwhile ideas for research. The research, if it is to be maximally fruitful, needs a driving, imaginative, resourceful and experienced investigator with time, freedom and opportunity to explore in any direction his imagination may suggest.

As recommended by the Research Policy Survey Committee, the staff of the Research Department is effecting closer liaison between scientists, institutions of higher learning and the scientific advisory committees on research and various responsible groups within the American Cancer Society. The revised machinery for evaluation of proposals for research, for review of scientific accomplishments and for administering research grants is designed for more expeditious handling of requests for grants and for greater continuity of support of productive research. Grants are made sufficiently flexible and in great enough variety to support research at all levels of exigency and complexity, from "wildcatting" in relatively unexplored areas to the intensified attack on specific objectives. A measure calculated to speed the determination of worthiness of the inspirational new idea is the provision (through Institutional Research Grants) of "fluid" funds which can be allocated on short notice by a committee of the institution's own scientists for the preliminary support of promising ideas for cancer research.

In appreciation of the vital necessity to attract and hold men of uncommon research ability, the American Cancer Society has reset its course of action in the direction of a more realistic encouragement for men to train for and engage in cancer research at all levels of professional endeavor. Emphasis is placed on the training of proficient investigators for staff positions within institutions of higher learning, and helping these institutions to create additional suitable faculty-level positions in which these men can pursue a productive career in cancer research.

Perhaps the most welcome recommendation of the Research Policy Survey Committee from the point of view of the career scientist is that additional suitable faculty-level positions for investigators of exceptional promise be created. In the view of the American Cancer Society, no less a move would provide both the requisite inspiration and enough of the material necessities of life for those "uncommon men" to whom we must look to

(Continued on Page 1262)

*Support of Cancer Research by the American Cancer Society. J. M. Education, 31(a):4-31 (Sept.) 1956 (Pt. 2).

**New Directions in Research Support. Science, 123:525, 1956.

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AMA Washington Letter

THE MONTH IN WASHINGTON

Regardless of which party organizes the next Congress or who occupies the White House, health and welfare legislation promises to take up considerable time and attention of lawmakers.

The national platforms on which the candidates of both parties have been campaigning are somewhat of a bluephint for the type of legislation to come in the 85th Congress, convening next January 3; generally, both parties advocate more rather than less federal participation in health and welfare programs. Here are some of the points in the two platforms:

Aid to Medical Schools.—The Republicans recommend "federal assistance to help build facilities to train more physicians and scientists" as a supplement to action of the 84th Congress authorizing federal grants to schools and other groups for laboratory research facilities. The Democrats state: "We pledge ourselves to initiate programs of federal financial aid, without federal controls, for medical education."

Aid to Hospital Construction.—The Republican plank: "Republican leadership has enlarged federal assistance for construction of hospitals." The Democratic plank: "We pledge continuing and increased support for hospital construction programs."

Medical Research.—Republicans: "We have asked the largest increase in research funds ever sought in one year to intensify attacks on cancer, mental illness, heart diseases and other dread diseases." Democrats: "We shall continue to support vigorously all efforts, both public and private, to wage relentless war on diseases. . . . We commend the Democratic party for its leadership in obtaining greater Congressional authorizations in this field."

Vocational Rehabilitation.—Republicans: "We have fully resolved to continue our steady gains in man's unending struggle against disease and disability." Democrats: "We pledge support to a vastly expanded rehabilitation program for these physically handicapped, including increased aid to states."

Medical Care—Republicans: "We have encouraged a notable expansion and improvement of voluntary health insurance, and urge that reinsurance and pooling arrangements be authorized to speed this progress." Democrats: "We pledge . . . increased federal aid to public health services, particularly in rural areas."

Social Security.—Republicans: "We shall continue to seek extension and perfection of a sound social security system." Democrats: "By lowering the retirement age for women and for disabled persons, the Democratic 84th Congress pioneered two great advances in social security. . . . We shall continue our efforts to broaden and strengthen this program by increasing benefits to keep pace with improving standards of living, by raising the wage base upon which benefits depend and by increasing benefits for each year of covered employment."

NOTES: Further evidence that federal aid to medical schools will be high on the agenda of the next Congress is the survey underway by the staff of the House Interstate and Foreign Commerce Committee. More than fifty organizations have been sent letters requesting background facts on financial needs of medical schools and the demand for medical school applicants "rather than arguments intended to support or oppose any particular form of federal aid." The information is being gathered as a preliminary to hearings in the next Congress.

Public Health Service announced the availability of 250 traineeship grants for graduate or specialized training of professional public health personnal under the newly enacted Health Amendments (Omnibus) Act. Emphasis is on bringing new and younger people into public health, men and women under thirty-five years of age. Congress voted $1 million for the program this year. Another 500 traineeships from a $2 million appropriation are offered for graduate nurses in administrative, supervisory and teaching positions.

While Defense Department officials were putting the finishing touches on regulations to carry out the military dependents medical care program, the State Department was working on its own version of a program for furnishing care to about 13,500 dependents of Foreign Service personnel stationed overseas. In most instances, medical and hospital care (with a $35 deductible clause) will be supplied in U. S. military installations.

To aid Defense in setting up fee schedules for military dependents using private physicians and facilities, state medical societies in co-operation with the American Medical Association have been asked to supply data on prevailing medical care charges.

New chief of the PHS Communicable Disease Center at Atlanta, Georgia, is Dr. Robert J. Anderson, a career PHS officer who has been serving as assistant chief of the division of special health services.

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

VOLUME 55 OCTOBER, 1956 NUMBER 10

Early Recognition of Diabetes

By Henry E. Oppenheimer, M.D.
St. Louis, Missouri

IT IS the belief of the majority of present day investigators that the two most important measures we have to prevent the complications of diabetes are its early detection and its subsequent control. This is forcibly brought out by an overwhelming majority of studies on the subject.[1-4] These show that "duration of the disease" and "degree of control" are the only two important factors determining the severity and number of chronic complications. In a broad summation of present day thinking, the better the control the longer the patient lives free of chronic complications.

It follows that early recognition of the disease is essential for adequate therapy. Unfortunately, many mild diabetics, undiagnosed and therefore untreated, go for long periods of time before their disease is discovered.[5] In these people, recognition of diabetes usually occurs only when one of the acute complications brings the patient to the physician.

In a sense, physicians, clinics and hospitals have always attempted to find diabetes early, but these efforts too frequently have involved only a routine urinalysis on new patients or readmissions (frequently an early morning specimen) or at best a fasting blood sugar determination. In mild diabetes, these would likely be normal or occasionally so minimally increased that they might be overlooked.

Diabetes detection drives have offered a more rational and thorough solution to early recognition of the disease. Admittedly, these drives have developed to their present form from earlier efforts to determine the incidence of diabetes in our population. Heterogenous groups, such as county health organizations, individual physicians in industrial and Selective Service surveys, and the United States Public Health Service have devised and carried out various types of detection programs more or less independently of each other.[6-9] It was soon apparent that the actual incidence of diabetes was between 1 per cent and 2 per cent, much higher than the 0.37 per cent previously estimated. In other words, better detection methods were being employed here than in the past.

The diabetes detection drives are now being sponsored annually by The American Diabetes Association and are carried out through its local affiliated organizations as well as many interested county and local medical societies. These drives have led the way in attempts to recognize diabetes early. They are a tremendous educational force in the community, of value to both physicians and laity.

The goals of a detection drive are to discover persons with diabetes and to bring them under medical care. Thus the disease is discovered before acute complications have occurred, and the early care which follows contributes to the prevention of complicating sequellae later in life.

While there are many different methods employed in diabetes detection they all embrace some or all of the following procedures:

1. A urinalysis one to two hours after a meal high in carbohydrate. The rationale in this timing

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lies in the fact that the mild diabetic will have glycosuria only in the immediate postprandial period and will be negative at other times—especially in the fasting state.

betes, have been studied for prior laboratory findings which should have made one suspicious of the disease. The majority of these were found to have had normal fasting blood sugars and consistently

TABLE I

Case No.	Age When Diagnosed	Sex	Per Cent Overweight When Diagnosed	Suspicious Tests			Year Diagnosed	Years Wasted	Insulin Units	Degenerative Complications
				FBS	Urinary Sugar	Earliest Year				
1	31	F	15		3+, 4+ & 4+*	1952	1954	2	NPH 12	No
2	56	F	>50	134		1949	1953	4	PZI 40	No
3	43	F	>50		4+	1953	1954	1	None	No
4	74	F	35	116 & 169	2+ & 0.5%	1948	1956	8	None	Yes
5	56	F	>50	165		1948	1953	5	None	No
6	58	F	>50		trace	1935	1949	14	None	Yes
7	60	F	45	112	3+	1938	1954	16	None	No
8	63	F	35	125	trace & 3+	1942	1945	3	NPH 5	No
9	57	F	15		trace	1942	1950	8	NPH 20	No
10	69	F	25	125	1+	1950	1953	3	None	No
11	61	M	25		"suspicious —repeat"	1935	1949	14	NPH 12	Yes
12	68	F	>50	187 & 143		1950	1952	2	None	Yes
13	65	F	45	156		1948	?	?	PZI 10	Yes
14	60	F	15		1+	1942	1956	14	None	No
15	45	F	45	134		1946	1953	7	None	No
16	57	F	15	130		1934	1948	14	None	Yes
17	64	F	45	121	0.5%	1950	1953	3	None	No
18	54	F	25	134 & 129	1+ & 1+	1934	1950	16	None	Yes
19	64	F	35	117		1934	1953	19	BZ 55	Yes
20	76	F	35	129 & 121 (107, 151, 247**)	1+	1946	1956	10	BZ 55	Yes
X	58	F	45	116, 131, 182, 112 & 116	1+	1937	1952	15	BZ 55	Yes
Summary	31-40—1 41-50—2 51-60—9 61-70—7 >70—2	20-F 1-M	15%—4 25%—3 35%—4 45%—5 >50%—5	110-119—6 >120—17 +Exton-Rose —1	Tr—1 1+—6 2+—3 3+—3 4+—3 Suspicious—1			0- 5—8 6-10—3 11-15—6 16-20—3 ?—1	Diet—11 Insulin—7 BZ 55—3	Yes—10 No—11

*In obstetrical clinic.
**Exton-Rose glucose tolerance test.

2. A blood glucose determination one to two hours after a similar meal. Again, the milder diabetic may have a normal fasting sugar and it may be abnormally elevated only at this critical postprandial period.

3. A glucose tolerance test on borderline or suspected diabetics.

There are no universal standards for the tests above, but in general, any glycosuria should be considered diabetes until proven otherwise. Any postprandial true glucose value between 120 to 200 mg. per 100 cc. should be suspected, and any value over 200 is very highly suspicious. (In Folin-Wu determinations, which contain reducing substances other than glucose, one must add 20 mg. to the above figures.) A standard glucose tolerance test should be carried out for a clearcut decision whenever there is a suspicion of diabetes and simpler data are inconclusive.[10]

In the past three or four years the charts of all long-standing clinic patients at the Out-Patient Department of Firmin Desloge Hospital of St. Louis University School of Medicine, who entered the diabetes clinic with "newly developed" diabetes, have been studied for prior laboratory findings which should have made one suspicious of the disease. The majority of these were found to have had normal fasting blood sugars and consistently negative urinary sugars. Many were obese individuals and, while it is purely conjectural, it would have been interesting to apply more critical tests as outlined above to this group.

In addition to these patients, there is a second group of twenty (plus one private patient of my own) whose laboratory findings are highly suspicious. These twenty-one certainly warranted more accurate evaluation long before the actual discovery of their diabetes. All of them had one or a combination of the following findings: (1) Glycosuria; (2) fasting hyperglycemia (over 120 mg. per 100 cc.—Folin-Wu determination); and (3) high normal fasting blood glucose (110 to 119 mg. per 100 cc.).

A résumé of the twenty outpatient department patients plus the one private patient (marked Case X) is contained in Table I. This group of asymptomatic undiagnosed diabetic patients have several interesting points in common, as summarized under Table I: (1) All but one were over age forty when definitely diagnosed; (2) all but one are female; (3) they were all greatly overweight when diagnosed; and (4) all but one are controlled on

small doses of insulin and diet, diet and carbutamide, or diet alone. (One patient, the exception, requires forty units of insulin daily.)

Degenerative complications are present in ten out of twenty-one. These include the following: Coronary disease or arteriosclerotic heart disease, 11; hypertension, 4; peripheral vascular disease, 3; retinopathy, 3; neuropathy, 1; and acute glaucoma, 1.1.

In looking over the suspicious tests, it is superficially difficult to comprehend how this group of patients could have been ignored as far as diabetes is concerned. The fact is that these suspicious findings occurred comparatively seldom in any given patient, being intermingled with a large number of normal ones, and usually the abnormal tests were only slightly elevated. If indeed they were noticed, they also were soon forgotten because of the urgency of a more dynamic disease at the time. Then, when an acute complication developed, diabetes was searched for and readily discovered. Obviously, by then, it had become more severe because of the previous absence of treatment and the stress of the complication itself. These points can be more readily understood by a résumé of Case 4.

Case Report

E. C., a female, aged seventy-four, was first admitted to Firmin Desloge Hospital for a fever of unknown origin in September, 1948. This subsided, but a workup revealed cholelithiasis. During that admission, fasting blood sugars were 103 and 116, and there were three negative tests for urinary sugar.

In December, 1948, the patient had a hysterectomy for myomata. An unexplained fever again developed, which was finally relieved by the removal of common duct stones. During six weeks of hospital stay, the fasting blood sugars were 169 and 107, and there were seven negative urinalyses, one 2 plus reaction and one recorded as 0.5 per cent. In October, 1949, a ventral hernia was repaired. At that time, one urinalysis was negative for sugar.

In April, 1956, the patient was diagnosed as having diabetes when she presented herself to the clinic with pruritis vulvae. There were also symptoms of polyuria and polydypsia. Her fasting blood sugar was 266, and a spot urinalysis showed 5 per cent sugar. The weight when her diabetes was discovered was 157 pounds, which was 30 to 39 per cent over the ideal for 5 feet, 0 inches, of height. The diabetes has been controlled on diet alone and the patient's last recorded weight was 140 pounds. She is also suffering from cardiac decompensation, chronic in nature, from coronary heart disease.

It would be difficult to deny that the situation described here is universal. Any investigator can certainly find similar cases wherever no concerted effort is made to recognize diabetes early.[11] High normal and slightly elevated values are usually not followed by more critical determinations such as postprandial studies or glucose tolerance tests. These should be done whenever the usual determinations warrant it; and following the pattern laid down in diabetes detection, they should also be carried out in all obese individuals and in those with a family history of diabetes. We will then have early recognition of diabetes.

Summary

1. Methods for the early recognition of diabetes patterned after those used in diabetes detection have been described. These include more critical laboratory studies than those usually performed.

2. The advantages of early recognition of the disease have been discussed. The aim in its early discovery is prevention of the complications of diabetes, both acute and chronic.

3. Findings on twenty-one patients who had suspicious laboratory findings prior to discovery of diabetes have been analyzed. It is believed that many cases exist universally, and that more critical tests, as discussed, should be utilized for early diagnosis.

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Office Management of Diabetes

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THE treatment of diabetes mellitus in the large general hospital has been abundantly discussed in previous publications, but as one looks over the medical literature on diabetes it is obvious that very little time has been devoted to outlining a method of treatment applicable to the care of the disease in a small town where the elaborate arrangements found in a large hospital are unavailable. Yet fully 50 per cent of the diabetic patients in the United States live in localities where they have to depend upon limited facilities and general practitioners or small town internists for the care of their disease. Dependence on some specialized clinic hundreds of miles distance from their home for their diabetic control will result in poor or inadequate management.

The ultimate objective aimed at in controlling diabetes is a balance between diet, exercise and available insulin, both endogenous and exogenous. Therefore, control of the patient under his normal habits of activity is bound to be a much better control than can be obtained under the abnormal conditions of hospital life. Whenever the degree of his disease will allow, he should receive his original control as an office patient or outpatient.

It should not be necessary in this paper to spend much time in outlining the criteria for diagnosis. The cardinal symptoms of polyuria, polydypsia, loss of weight, and weakness are familiar to all physicians. The presence of glycosuria and hyperglycemia substantiate the diagnosis. It might be well to recall to your mind that a fasting blood sugar level above 160 mg. per cent should be considered as evidence of probable diabetes; whereas, a fasting blood sugar below 100 mg. per cent is probably not diabetes, but in the presence of symptoms should be further investigated with a glucose tolerance test. The absence of any symptoms and a fasting blood sugar under 80 mg. per cent is justification for presuming, for the time being, that no diabetes is present.

The equipment necessary in the office of a physician who has occasion to see a few diabetic patients each year is rather simple. Examination of the urine by the use of Clinitest tablets is a simple procedure and the materials are readily obtainable in most drug stores. The examination of the urine for acetone by a similar tablet test is just as reliable and readily obtainable. Equipment and materials for doing a Folin-Wu blood sugar test should cost less than $150.00 and repeated tests can be done at a cost, in actual materials used, of less than ten cents a test. However, general hospitals fully equipped to do good blood sugar estimations are within 150 miles of most of the physicians in Michigan. If the anticoagulant used in the preparation of the blood specimen is a five-to-two-mixture of sodium fluoride and potassium oxylate, the blood can be shipped by mail and still result in an accurate test.

Selection of cases suitable for office or outpatient control is important clinically and is based on the degree of severity and the absence of complications.

It has been my habit, in the past, to hospitalize persons who show a definite degree of acidosis, severe complications, such as vascular lesions of the extremities, and obvious or severe cerebrovascular or coronary disease. These patients present a problem which is far too complicated to allow treatment at home or even with daily visits to the doctor's office. With these facts in mind, it is obvious then that the diabetic patient with moderate symptoms, only slight or no acidosis, no massive skin lesions or vascular disease of the extremities, and only moderate or no ocular lesions, can well be treated as home cases with frequent visits to the doctor's office. It is my firm belief that this differentiation between persons treated in the office and those who should be hospitalized should be rigidly adhered to.

It is important to divide the treatment into three distinct parts: first, the instruction of the patient; second, the diet therapy; and third, the insulin therapy. Instruction of the patient is by far the most important part of the entire therapy

Read before the Upper Peninsula Medical Society, June, 1956.

routine. It is not possible here to repeat the entire course of lectures I give my patients, but the preliminary visits to the doctor's office should include a thorough discussion of the normal carbohydrate metabolism. This should be followed by a frank discussion of the abnormal metabolism of carbohydrates occurring during active diabetes. Following this discussion, the patient should be told how this abnormal metabolism can be corrected by diet and insulin therapy. I cannot stress too much the importance of these three factors in instructing patients. Unless they understand these details completely, they will be unable and unwilling to co-operate with the physician in the control of the disease. If the physician is not willing to devote the time necessary to this instruction period, he should give up the idea of taking care of patients with diabetes.

The second part of the treatment of diabetes is the dietary routine. It has long been the habit of most clinicians to develop their own diets and teach their patients diets suited to the individual and fitted to the normal eating habits of the patient and his family. It should be remembered, however, that the amount of protein, fat and carbohydrate in the diet must be constant day after day. Just how this shall be divided among the various food substances the patient desires to eat depends upon the habits of the patient and his family. The caloric value of the diet depends upon his metabolic efficiency as an individual and the amount of physical work and exercise his habits demand. Any given diabetic patient might be well controlled on 1500 or 3000 calories a day. In the one instance he may lose weight and in the other may gain weight, but the actual control of his diabetes will be as efficient in either case. Any diet that is constant for the individual day after day and does not allow him to lose or gain weight out of proportion to his height is satisfactory. By far the best method to be used by physicians seeing an occasional case of diabetes is to obtain diet sheets and instruction books from the various pharmaceutical houses which manufacture insulin, or from the American Diabetes Association. These books and diet sheets have been well prepared by experts in the field and are easily understood by the physician and the patient. They are entirely satisfactory and make the diabetic control and instruction of the patient much easier for the physician seeing only an occasional case.

It is important for the physician to become familiar with the particular diet method to be used and to spend enough time in teaching to be sure the patient knows how to measure the diet and how to substitute one food for another.

At this point in the treatment of diabetes, the physician has to decide whether he will or will not use insulin. In many cases this decision is a difficult one to make. If the fasting blood sugar is somewhere in the range bttween 200 and 250 mg. per cent and there is no acidosis and only a minimum of symptoms, or if the patient is in the older age group, that is forty years or older, it is often better to try a measured diet for two or three weeks since many such cases will be controlled on diet alone. However, if the blood sugar is over 250 mg. per cent, the symptoms rather pronounced and of long standing, if the individual is under thirty years of age, or if there is a small amount of acetone in the urine, the disease should be more rapidly controlled by instituting insulin therapy at once.

In the aforementioned milder case, urinary sugar should be watched by teaching the patient the tablet method of urinalysis which he can do at home, taking urine specimens before each meal and recording them on a chart. He should be instructed to bring this chart to the doctor's office weekly. If there is a definite decline in the degree of glycosuria from week to week, it can be assumed that he will ultimately be controlled on diet alone. However, this should be checked by 11 a.m. blood sugar determinations every two or three weeks until the ultimate decision has been reached. If glycosuria continues and the 11 a.m. blood sugar remains higher than 180 mg. per cent, the advisability of instituting insulin therapy is obvious.

To summarize up to this point, we have two groups who should be started on insulin therapy. In the one group are those patients who have severe symptoms, a high degree of hyperglycemia and acidosis, and in the second instance those patients who have failed to respond to the diet therapy alone. In either instance, the starting of insulin therapy is governed by the same rules. Reduction of hyperglycemia with long acting insulin in the office-managed case is slower but far more satisfactory than with unmodified insulin. This is in contradistinction to the hospitalized case where rapid control is possible because of the availability of laboratory checks. NPH, Lente, two-to-one mixtures of regular and PZI insulin, or

Globin insulin have all been found very satisfactory in the outpatient control of diabetes.

Here again the instruction of the patient is important. The sterilization of the syringe and needle, the different types and strengths of insulin, the selection of points of injection are of utmost importance. Sterilization by cleansing the syringe with alcohol and sterile water has been found most satisfactory and much more simple than boiling. Patients should be cautioned against too frequent use of the same site of injection. Developing a pattern of site selection to be used from day to day is important. The anterior surface of the thigh, the posterior surface of the upper arm, and the surface of the abdomen are sites most frequently used.

Selection of the original dose of insulin is at best a scientific guess based on previous experience. I like to use two doses daily, before breakfast and before supper, of ten to fifteen units each if the blood sugar is in the neighborhood of 300 mg. per cent. If it is in the neighborhood of 400 mg. per cent, I would increase that dose to twenty units each. It is important at this time to be sure that the patient is repeating his urinalysis for glycosuria before each meal and recording these results. If the urine test promptly drops to negative, it would be well to reduce the dose to ten units twice a day, but if it continues to remain positive it may be necessary to increase the dose to twenty or twenty-five units as time goes on. These decisions are to be made by the physician and not by the patient.

During the early stages of insulin therapy for diabetic control, overdosage is a strong possibility and may result in insulin shock or hypoglycemic reactions. The patient must be fully informed about this possibility, since early recognition of the condition is important. Glucose administration will promptly correct the situation. Cold perspiration, weakness, and lack of muscle control are the usual early symptoms. Glucose should be given in the form of orange juice, Karo syrup or glucose wafers. If none of the three mentioned above are available, a candy bar will suffice.

The ultimate dose of insulin is determined by the trial and error process. If the urine becomes negative, the dose should be slightly decreased. If the urinalysis remains positive, the dose should be increased until it ultimately returns to negative. If the repeated urinalysis seems to be at all out of line, an 11 a.m. blood sugar or three blood sugar determinations daily before each meal should be taken to determine the degree of hyperglycemia or hypoglycemia. In the younger diabetic patient the preprandial blood sugar should be 130 mg. per cent or less. In the age group over sixty years, preprandial blood sugars of 160 mg. per cent are still considered good control.

After the urinary sugar remains negative and the blood sugar remains stable, examination of the urine three times a day can be dropped to once a week. The future control of the diabetic through the office is maintained by frequent visits to the doctor's office. The two doses of insulin daily should be continued if the total insulin requirement is over ten units in children and thirty units in adults. This method superimposes the curve of activity of each dose of insulin resulting in a more level blood sugar curve throughout the twenty-four-hour-period. However, when the total requirement is small, it can all be given before breakfast.

After proper instruction of the more intelligent patient, it might be possible to let him control his own diabetes, watching his urine for sugar and varying the dose accordingly. This may be satisfactory in many cases, but the tendency on the part of most patients to slip off their diet and get careless with their disease is too great. Frequent visits to his doctor's office has the same stimulating effect on his desire to follow his diet as weekly attendance at church has on his morals. He should be encouraged to bring the record of the urine test to the office once a month. At the time of these visits, a blood sugar estimation should be done to verify the results of the urine test. In older patients, the office visit should include a blood pressure reading, eye ground examination, a search for vascular changes in the legs, and he should be questioned about any problems he might have with the diet. His work schedule may change, resulting in necessary changes in the dietary program, and many other questions may arise which can be answered at the time of these visits.

The ultimate object of treatment is to obtain good diabetic control meeting the following standards: (1) Maintenance of normal weight; (2) acetone free urine at all times; and (3) preprandial blood sugar levels of 120 to 160 mg. per cent. Under these conditions there will be a minimum of danger of vascular complications so common

(Continued on Page 1206)

A Controlled Trial of Carbutamide in Diabetic Patients

An Interim Report

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IT HAS been known for some years that certain sulphonamide derivatives would lower the blood sugar in animals when taken orally.[1-6] This phenomenon was of only laboratory interest, however, until the report of Franke and Fuchs[7] of the powerful hypoglycemic effects in man of *1-Butyl-3-Sulfonylurea*, called BZ55 in Germany and Carbutamide in America. Since then several thousands of patients have been treated with this and related compounds in Germany, America, the United Kingdom and Canada. The hypoglycemic effect and low order of toxicity, at least in short term studies, have been confirmed,[8-10] but the place of the new substances in the treatment of diabetes is not yet certain. This paper records our clinical experiences with Carbutamide, and a discussion of its proper place in therapy.

TABLE I. BASIC DATA ON THE EIGHT PATIENTS STUDIED IN HOSPITAL

Number	Age	Sex	Family History	Habitus	Duration (Yrs.)	Daily Insulin Requirements	Diet				Initial Weight (Lbs.)	Final Weight (Lbs.)	Urinary Glucose gm/24 hours	Urinary Glucose gm/kg body wt./24 hrs.
							Calories	Protein	Fat	Carbohydrate				
1	53	M	Nil	O	5	0	1500	90	40	200	179	177	12	0.15
2	40	F	Nil	O	4	0	2200	90	50	350	156	157	5.6	0.08
3	73	F	+	T	20	120	2100	95	75	260	146	146	77.3	1.17
4	52	F	+	O	10	0	2300	120	122	230	233	232	28.9	0.27
5	57	F	Nil	O	15	0	1100	80	33	120	142	130	78	1.21
6	71	F	Nil	T	New	19	2200	70	58	350	126	125	5.2	0.09
7	32	F	Nil	T	12	46	2500	100	100	300	108	107	84.8	1.74
8	15	F	Nil	T	11	28	2100	95	75	260	97	98	89	2.09

TABLE II. MEAN VALUES FOR BASIC DATA
Groups 1-4

	Total	Mean Age (Yrs.)	Sex		Obese	Mean Duration (Yrs.)	Mean Age of Onset (Yrs.)	Family History	Mean Insulin Requirements	Initial Weight (Lbs.)	Final Weight (Lbs.)
			M	F							
Group 1	5	62	0	5	5	8.1	54	2	31	155.9	154.9
Group 2	5	68.2	1	4	3	7.5	59.6	1	24	161.1	164.3
Groups 1 & 2	10	66.0	1	9	8	7.9	56.8	3	27	159.8	159.6
Group 3	9	57	2	7	3	11	45.8	4	37	150	150.7
Group 4	5	40	3	2	1	13	27	3	91	142	142

The trial is in two parts, one on hospital inpatients, one on outpatients. They are continuing, and this communication is an interim account of the results. It is submitted without statistical analysis, which is necessarily deferred until its completion, and conclusions are therefore tentative.

Material

All patients were selected either because they were badly controlled by the classic means or be-

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TABLE III.
DETAILS OF DIETS DURING THE OUTPATIENT TRIAL
Mean Values for Groups 1-4

Group No.	Calories	Protein*	Fat*	Carbohydrate*
Group 1	1390	84	41	171
Group 2	1372	67	44	175
Group 1 & 2	1381	76	43	173
Group 3	1500	86	54	145
Group 4	1951	92	75	226

*Expressed as gm. per twenty-four hours.

in the urine and *postprandial* and fasting blood sugars estimated daily. Carbutamide 1.0 gm. every six hours was given by mouth from the sixth to the tenth day.

Outpatient Trial.—These patients were observed for three consecutive periods of two weeks. Placebo tablets were given in weeks one and two and five and six. Carbutamide (tabs. 0.5 gm.) was given in weeks three and four. The patients were instructed to take six tablets on the first day, four on the second, and two on subsequent days of each study period. In this way, a loading dose was given in weeks three and four without arousing the patient's suspicion of a change in regimen. The patients were seen weekly, when they were weighed and fasting blood samples drawn for sugar determinations. Each was taught to test for glycosuria at least five times daily, at prescribed intervals, using test tape (Testape-Lilly). All used tape was dried and saved, and submitted each week. Tapes were graded according to color without knowledge of the patient's identity. In this way the frequency of occurrence of concentrations of 0, 0.1, 0.25, 0.5 or 2.0 (or more) per cent of glucose (designated 1-5) in the urine was estimated.

Prior to the trial and at the end of the study period the patient's diet for the previous six weeks was reviewed. Mean values for each group are presented in Table III.

No toxicity studies were made, as they have been amply reported elsewhere.[7-10] One asthmatic patient developed a mild exfoliative dermatitis, but recovered rapidly when the drug was withdrawn.

TABLE IV. MEAN VALUES OF URINE SUGAR EXCRETION AND FASTING AND TWO HOURS POSTPRANDIAL BLOOD SUGAR LEVELS
Before, during and after administration of sulfonylurea 4 gm. daily by mouth.

No.	Urine Sugar (gm/24 hrs.)			Postprandial Blood Sugar (mg/100 ml)			Fasting Blood Sugar (mg/100 ml)		
	Before	During	After	Before	During	After	Before	During	After
1	12.1	0.8	7.4	232	136	161	153	108	143
2	5.6	1.8	2.3	220	182	174	147	142	137
3	77.3	41.0	96.3	443	404	475	369	318	363
4	28.9	1.3	9.8	243	173	140	184	125	124
				(b)					
5	78.2	37.6	17.2	425	347	321	345	239	229
6	5.2	1.5	0.7	188	173	85	171	100	109
				(c)					
7	85	87	164	351	289	372	223	158	156
8	89	136	—	300	301	—	369	318	—

Figures represent means of five days' observations.

cause they were taking insulin in excess of 100 units daily, or both. Eight patients were studied in the hospital and their clinical details are presented in Table I. Sixty patients are included in the outpatient trial. Of these, twelve have defaulted at some time in the course, and their early results have been discarded. Nine patients are still under study, and inconclusive data have so far been collected on fifteen others. The results from the remaining twenty-four patients are reported here. They have been subdivided retrospectively as follows:

Group 1. Five patients: unequivocal successes.

Group 2. Five patients: probable successes.

Group 3. Nine patients: patients who improved progressively throughout the six weeks.

Group 4. Five patients: unequivocal failures.

Clinical details of these groups of patients are presented in Table II.

Methods

Inpatient Trial.—These patients were studied for three consecutive five-day periods. Diet and exercise were kept constant, and insulin (if any) was unchanged throughout the study period. Glucose excretion per twenty-four hours was measured

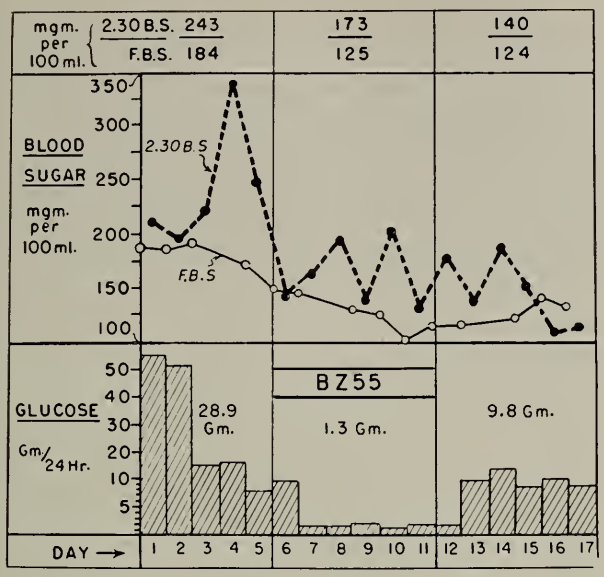


Fig. 1. Effects of Carbutamide 1 gm. every six hours on glycosuria and blood sugar in patient No. 4.

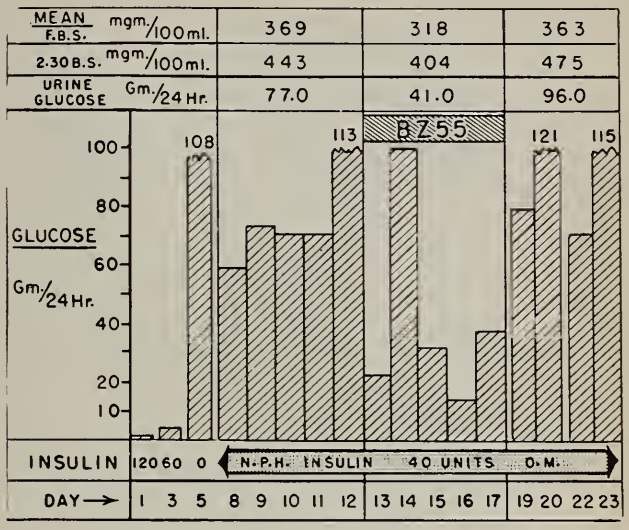


Fig. 2. Effects of Carbutamide 1 gm. every six hours on glycosuria and blood sugar in patient No. 3. Note reduction in insulin dosage.

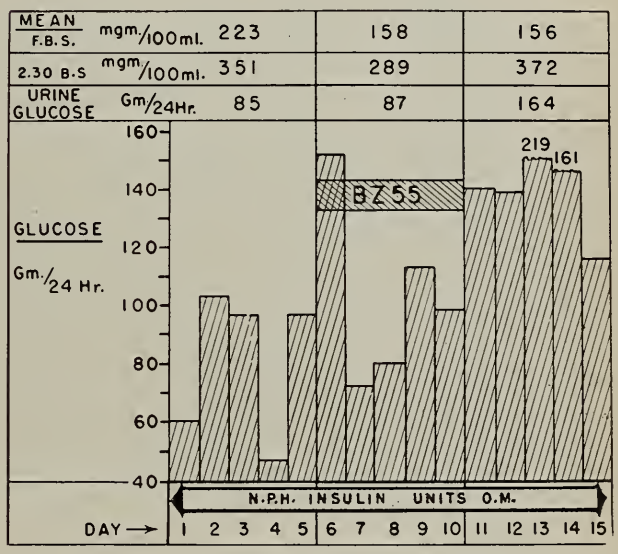


Fig. 3. Effects of Carbutamide 1 gm. every six hours on glycosuria and blood sugar in patient No. 7. Insulin 46 units daily throughout.

Sugar determinations were made by Nelson's[11] modification of Somogyi's method.

Results

Inpatients.—A favorable response was judged as one showing a fall in the mean twenty-four-hour urine glucose during the administration of the drug, with a rise subsequent to its withdrawal.

Table IV(a) contains results from four patients in whom such a success was observed. A less conclusive effect is seen upon the blood sugar levels. Results from two patients (Cases 5 and 6), shown in Table IV(b), indicate progressive improvement throughout the study period. Two patients (Cases 7 and 8) did not improve, and their results are presented in Table IV(c).

Figure 1 shows individual values for Case 4, during the study; unequivocal improvement in the urine glucose excretion is demonstrated. Figure 2 shows similar improvement, with details of the reduction in insulin dosage. Figure 3 shows failure of response to the drug.

Outpatients.—A reduction in glucose excretion and blood sugar levels during weeks three and four, as compared with weeks one and two and five and six, has been taken as a favorable response.

By this definition, five cases (Group 1) showed evidence of success. An additional five cases were certain failures (Group 4). In nine cases (Group 3), progressive improvement was seen during the six weeks' study period, without increase in body weight. These results may be due to the better observation of diet. Five other patients (Group 2) continued to improve in the fifth and sixth weeks, but are considered as probable successes because: (1) Weight gain continued throughout the six weeks' observation period (Mean values: start of trial 161.1, start of BZ55 162.3, end of BZ55 163.2, and end of trial 164.3 lbs.); and (2) the blood sugar level in the sixth week was in each case higher than in the fifth (Mean values, fifth week 137, sixth week 160 mg/100 ml. blood (see Fig. 4, Group 2)). Group 2 is recorded separately, but Groups 1 and 2 are also presented together.

TABLE V. MEAN FASTING BLOOD SUGAR LEVELS (MG/100 ML. BLOOD)
Groups 1-4 During the Six Weeks' Study Period.

Group No.	Before	During Treatment	After
Group 1	211	143	182
Group 2	213	150	149
Groups 1 & 2	212	146	165
Group 3	196	145	135
Group 4	179	202	219

pitalized patients can be precisely determined and analyzed. These patients were given a relatively large dose of Carbutamide, and when a response occurred, it was prompt and dramatic (Table IV(a) and IV (b), Fig. 2). The fall in glucose excretion was usually more impressive than the decrease in mean blood sugar values, and appeared valid in every case. The two patients in

TABLE VI. MEAN VALUES FOR GLYCOSURIA (USING TESTAPE)
Groups 1-4 During the Six Weeks' Study Period

	Before					During Treatment					After				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Group 1	28	19	11	4	2	43	17	6	0	0	19	35	13	0	1
Group 2	14	17	17	8	12	38	10	11	10	4	34	14	11	3	2
Groups 1 & 2	20	18	11	6	7	36	14	9	5	2	27	5	12	1	2
Group 3	16	15	18	9	7	33	16	9	8	4	44	20	5	1	1
Group 4	25	14	15	5	6	18	19	12	11	5	24	18	14	5	3

1 =0, 2 =0.10, 3 =0.25, 4 =0.50, 5 =2 or more per cent glycosuria. For details, see text.

Tables V and VI contain the mean results from observations on the blood and urine respectively. They are arranged as Groups 1-4. Figure 4 represents the results diagrammatically.

Certain differences are apparent on inspection. It is seen that the average age and age of onset of the disease is much higher in Group 1 (62,54), than in Group 4 (40,27) and also that its average duration is less (8.1, 13 years). All patients in Group 1 were overweight, as compared with only one in Group 4. A family history of the disease was present in two of Group 1, and in three of Group 4. Only in Group 2 was weight gain considerable (mean 3.2 lbs.) over the six weeks' observation period.

Discussion

The evaluation of a hypoglycemic agent in diabetic patients presents many difficulties. Apparent poor control may not result from inherent instability of the disease but rather from lack of attention on the part of the individual patient to his particular regimen. Any improvement of the diabetic status of these patients must be judged in the light of all the variable factors that are present, such as diet, exercise, amount of insulin and accuracy in performing the tests. For this reason, a controlled study is valuable since each patient may serve as his own control with the use of a placebo, as in the outpatient trial, or many of the variables may be removed by hospitalization as in the inpatient trial.

The results obtained in Method 1 on hospitalized patients can be precisely determined and analyzed. These patients were given a relatively large dose of Carbutamide, and when a response occurred, it was prompt and dramatic (Table IV(a) and IV (b), Fig. 2). The fall in glucose excretion was usually more impressive than the decrease in mean blood sugar values, and appeared valid in every case. The two patients in Table IV(b) who continued to show improvement after the drug was withdrawn may be thought to have done so on the basis of diet and hospitalization alone. However, it is known that Carbutamide may persist in the blood for as long as six days after the drug has been stopped.[10] In short-term study periods of five days, improvement in the third period was probably due to continuing action of the drug. This may represent an individual difference in susceptibility to Carbutamide, for all grades of response can be seen in patients 1 through 6, varying from total relapse after the drug was withdrawn (Case 3) to almost complete elimination of glycosuria (Case 6). The two patients who failed to respond in this trial were both thin juvenile diabetics who required insulin, whereas four of the other six were obese noninsulin-requiring diabetics. Certainly, it is possible to determine response or lack of response promptly by this method, but it is time consuming and expensive for the patient.

The outpatient trial has the advantage of not interfering with the patient's way of life. The method of testing the urine has some drawbacks; the scale is unfortunate, and it would be preferable to have information of urinary glucose values between 0.5 and 2.0 per cent. Moreover, there is some fading of tape, which makes retrospective grading difficult in certain cases. But protective experiments have shown that this does not invalidate the procedure. All these variables operate throughout the six weeks of the trial, and effects confined to weeks three and four cannot be dis-

counted on these grounds alone. In its favor the method has objectivity, convenience and practicability.

The results have been classified by simple inspection of the data. To show the basis on which the determination was made, Tables V and VI are represented graphically in Fig. 4. Individual values for each patient have not been given but only the mean values for each group. The difference between Groups 1 and 2 is slight, and it is probable that patients in both groups have the same order of responsiveness to Carbutamide. Group 3 patients who showed progressive improvement after Carbutamide was stopped have been separated from the others, because the continuing decrease in blood sugar and glycosuria cannot be considered to be due to the persistence of action of Carbutamide on the evidence now available. These patients are included in the followup study continuing at present and it is hoped that this will determine whether the difference between Groups 1 and 2 and Group 3 is real or apparent.

Various factors have been said to indicate whether or not a given patient will respond to the sulfonylureas. These include age of onset, duration of the diabetes, habitus of the patient, and severity of the diabetes. Tables I and II include these basic data for all patients. Those who responded favorably to the drugs were older, and their disease began later in life than those who did not. Most patients who showed a good result were obese, while those who failed to improve were mostly underweight or normal. The average daily insulin dose of the failures was approximately three times that of the successes. The mean duration of the diabetes was greater in the failures but the difference was not striking. While the comparison of this type of mean value may indicate trends and allow generalization to be made, occasional patients were found who appeared to respond well to the drug though this would not have been predicted in advance. One such patient in Group 3 who had a marked response to the drug was a thin male, age fifty-five, who had developed diabetes thirty years previously and who was taking twenty-five units of insulin daily with indifferent control. Another, a colored woman, who had had diabetes for twenty-four years and required 102 units of insulin daily, also showed a marked progressive improvement while receiving Carbutamide. Therefore, with the possible exception of unstable juvenile patients, it should not be

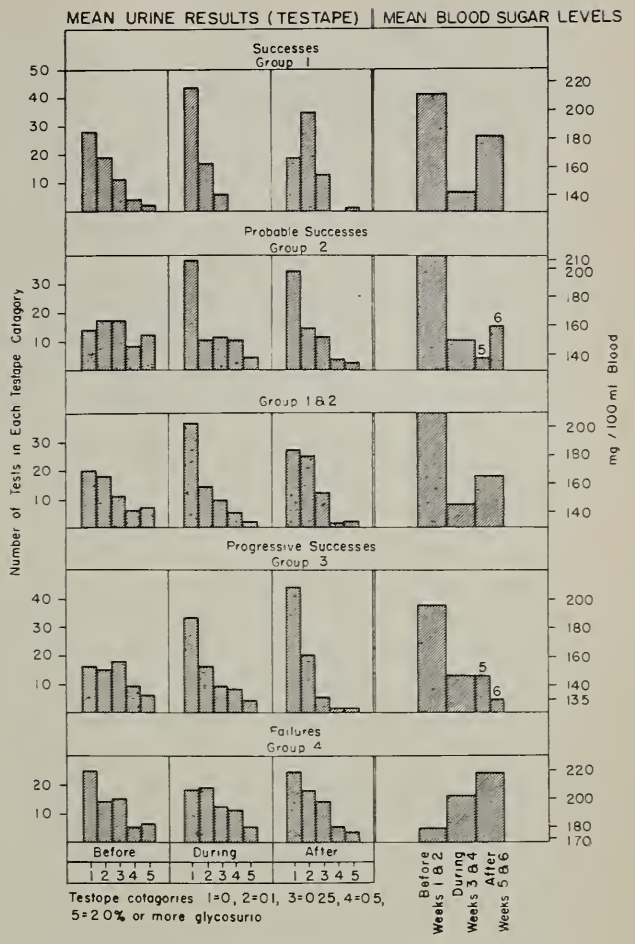


Fig. 4. Histogram of mean results in Groups 1-4 during the outpatient study.

assumed that an individual patient will not respond to the drugs before they have been tried.

No attempt has been made in the work described here to determine whether a response to the sulfonylureas will necessarily benefit the patient, nor has insulin been systematically eliminated from the patient's regimen. It appears in many instances that patients having mild diabetes and requiring small doses of insulin may be continued on sulfonylurea therapy without insulin. It also seems that those patients whose glycosuria and hyperglycemia are most improved are the obese patients with mild diabetes, who should be adequately controlled by diet alone. The last two columns of Table II list the mean weight changes for the patients in all groups; only slight differences are seen following administration of the drug for two weeks. However, as the drug is continued during the follow-up period, indications are appearing that those patients who respond are gaining weight in spite of the fact that they seem

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Diabetic Retinopathy for the General Practitioner

By L. L. Loder, M.D.
Muskegon, Michigan

THIS article is being written with the thought in mind that many men who read this JOURNAL do not use their ophthalmoscope routinely and that a bit of encouragement might add valuable information to seeing the patient as a whole. In this particular instance, the patient with diabetes.

First, it is important that we take stock of the instruments we use to elicit the eye findings. A pen light with a sharp-edged beam will make vascularization of the iris and lens opacities easier to see. The ophthalmoscope, differing from a stethoscope, needs frequent attention. First it should be a scope which can be quickly changed from pinhole to full beam light without dismantling. Look to see that the bulb is not dark with carbon, which will reduce the light. Keep the batteries fresh. The lenses through which you look must be kept clean; the amount of dirt that has collected on them may surprise you. With a cotton applicator and some waste ether these can be quickly cleaned.

Since it is reminding rather than informing that most of us need, let us review a few points on getting and sharpening a fundus picture. Most men practicing general medicine do not wish to dilate the pupil for fundas nor look for the possible ocular pressure change it might precipitate. Without dilating, the best findings can be made in a darkened room where physiologic dilatation takes place. The examination should be started with the observer's scope about twelve inches in front of the eye. Looking through the pupil from this distance, with the patient looking just to his left of the light (if it is the right eye being observed), turn the lenses in the scope until a good, clear, red reflex is observed. Then the presence of the opacities in the lens and media of the eye can be observed. With the patient's eye in this position, move close to the eye and, with a minor change only in the lens power, the optic disc will come into sharp definition. If the corneal reflex is disturbing, tilting the scope and catching the pupil with the edge of the beam permits a view more easily. Also a few seconds of staring permits a focus which at first is difficult.

Clinical Findings

With diabetic changes of the retina in mind, once a good view of the fundus is obtained there may be little change seen from normal if changes are early. The disc will be normal and the macula, which is fifteen degrees temporal to the disc, will also be normal. The area between the disc and macula, designated centrocecal, may show a single or several punctate hemorrhagic spots without surrounding inflammation. A bit more advanced changes will show white sharply-marginated exudates, usually arranged in a circular halo around the macula; again these are without inflammation. In the younger diabetic patient, particularly one who is reacting badly to his diabetes, gray streaks may be seen originating in the vicinity of the disc and extending out into the vitreous or stretching out across the retina. The level of these changes can be determined by moving the light beam back and forth across them. If they stand still they are on the retina, if they seem to move they are in the media. This is known as paralax. These gray streaks are proliferative retinitis and soon will carry with them small new formed vessels which lead to hemorrhages and more proliferation. Further extension of this may lead to organization of the vitreous, or shrinking of the bands and retinal separation. Where diabetes comes on in later years, less violent changes are more apt to occur. Here, where vascular sclerosis and atheromatous changes are present, sudden loss of vision or partial field loss may occur as a result of central venous occlusion. Although this is not exclusively a diabetic change, it is much more prevalent in the diabetic. Here the retinal veins are markedly dilated with an arteriovenous ratio about 1 to 4 or more, rather than the normal 3 to 4. Hemorrhages which are linear, flame-shaped and blotchy may be present throughout

the fundus. Occasionally, the hemorrhage may be preretinal and obscure all retinal markings. Many times the eye findings are the first indication that the patient may have diabetes. This does not mean, however, that this marks the onset of his diabetes; on the contrary, it means that diabetes has been present for many years.

Speculative and Investigative Thinking On Diabetic Retinopathy

Just why retinal changes occur has not yet been determined. A great deal of effort and constructive thinking has gone into the solving of this problem and almost any hypothesis will find supporters to uphold it. However, there are many very interesting observations and deductions made. Most observers have stressed that the occurence of retinal vascular abnormalities is in proportion to the duration of the disease rather than its severity. In recent years it has been brought out that the basic lesions in diabetic retinopathy are minute capillary aneurysms and that these are the precursors of the punctate hemorrhages. More than this, a large percentage of diabetic patients with capillary aneurysms also have nephritic intercapillary glomerular sclerosis characteristic of Kimmelstiel-Wilson syndrome. The frequency of Kimmelstiel-Wilson lesions in diabetic patients was emphasized by Dana, who states that "out of 196 autopsies on diabetics carried out at Johns Hopkins, fifty-seven had Kimmelstiel-Wilson lesions present." He further states that "insulin deficiency is not essential for the retinal capillary defect" and concludes that "it is likely that the pathogenesis of the capillary damage derives from a disturbance of carbohydrate and lipid metabolism, other than the deficiency of insulin."

Friedenwald likewise states that "saccular micro-aneurysms of diabetic retinopathy closely resembling lesions in the glomerulae of the kidney in Kimmelstiel-Wilson syndrome commonly occur together and that they are manifestations of the same disease process, and are dependent on atherosclerosis, hypertension or arteriosclerosis." He feels that the vascular lesion in those with diabetes may be due to an interaction between the metabolic abnormality of diabetes and adrenocortical function.

This hypothesis has been supported by the fact that retinal and glomerular lesions have been produced experimentally in the rabbit with Alloxan-induced diabetes by the administration of cortisone and corticotropin. Goodman says "In diabetes we are dealing with a profound metabolic disturbance affecting the metabolic functions of many organs and tissues, resulting in a state of imbalance of the pancreatic, anterior pituitary, and adrenocortical hormones. Since few diabetic patients even with the assistance of insulin and diet can respond at all times in a completely physiologic manner to insulin, food, exercise, et cetera, metabolic deviations from normal must be expected." From this it would follow that retinopathy and glomerulosclerosis are caused not alone by the lack of insulin but beyond by the preponderance of the pituitary and adrenocortical hormones.

More and more it seems to be pointed up that the incidence of retinopathy in diabetes is not related so much to the control and severity of the disease but rather to the duration. Three different observers in taking a large group of unselected diabetic patients came up with about the same incidence, percentagewise. Cowan-Carmichael and Campana found retinopathy in 43 per cent (215 of 500 unselected patients having diabetes), Spoont 42 per cent, and Brill and his associates 40 per cent.

Treatment

Little that has been done seems to have a great deal of effect on the control of diabetic retinopathy once it has started.

Many investigators have shown that capillary fragility is a manifestation of diabetes and that the duration of the disease is more important than the chronologic age of the patient in the manifestation of the fragility. Ruling out blood dyscrasia and vitamin C deficiency, various preparations have been used for their effect on capillary permeability. Rutin is probably the most popular of these. Goodman quotes statistics on Rutin: "180 mg. daily were given for three months without any change in the retinopathy." Even though its effectiveness is questionable, it is still freely administered.

Testosterone was used by Saskin, Waldman and Pelner, rationalizing that diabetic retinopathy occurs more frequently and earlier in women than men, that there is possible liver dysfunction in diabetes with vascular disease, and that there is usually a negative nitrogen balance present. Saskin showed that the damaged liver is unable to

inactivate estrogen but still can inactivate androgen, thus resulting in overabundance of estrogen. Testosterone is an anabolic steriod, so substitution was made with it. Using it, nitrogen balance became positive. During the treatment, early punctate hemorrhages disappeared but there was no effect on the visual loss. Thus, some grounds were found to justify the use of testosterone and to suspect damaged liver as a possible prerequisite for retinopathy to occur.

It is quite well agreed that when diabetes presents itself early in life, more violent types of retinopathy are prone to occur. These are the ones in whom the diabetes is more difficult to control largely because of patients' co-operation. It is my observation that when retinopathy occurs in the adult, the rapidity of breakdown has a fairly direct relationship to the control of diabetes. On several occasions I have seen a moderate retinopathy become severe following a month or two of Florida vacation, during which diabetes was very secondary. To me the best form of treatment still is prophylactic emphasis on meticulous control of the diabetes rather than attempts to rectify end results of deterioration. Along with the medical control of diabetes goes physical and psychologic control. In this connection Duke-Elder lists these four points in order of importance: (1) dispel anxiety, (2) reduce speed, (3) lessen intake and promote elimination, and (4) exclude toxemia.

Many people suffering from diabetes wonder if they should stop reading and watching television; this has no apparent effect on the progress of the retinopathy. I quote Duke-Elder again, "When, despite optical accessories it becomes difficult to read, it is usually much more advisable for psychological reasons to prohibit it rather than to allow the patient to be constantly annoyed and distressed by his difficulties in attempting a task which becomes more and more trying and ultimately impossible."

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OFFICE MANAGEMENT OF DIABETES

(Continued from Page 1198)

in poorly controlled cases after fifteen to twenty years.

The degree of diabetes and the insulin requirement does not always remain constant after the initial control has betn established. It may vary under certain conditions: (1) Change in muscular activity brought on by change in work or play activities; (2) emotional upset; (3) infections; or (4) many other less obvious factors. Continuous repeated checkup examinations are therefore of the utmost importance.

Successful treatment of diabetes requires much time and patience on the part of the physician, but I know of no place in medicine where the doctor will get as much pleasure and satisfaction as from the realization that he has carried a diabetic patient successfully for twenty-five to thirty years. As time goes on I hope to change that statement to "fifty to sixty years."

Brittle Diabetes

By E. Paul Sheridan, M.D.
Denver, Colorado

BRITTLE diabetes, orginally described by Woodyatt, includes those patients showing wide fluctuations of hyperglycemia and hypoglycemia under ideal metabolic conditions. These variations may occur even though the diet is constant, exercise adequate, insulin dosage accurate, and as far as can be determined no abnormalities of the pituitary, thyroid and adrenal gland exist.

Fortunately, this group of diabetic patients is quite small and the incidence would seem to be about 1 to 2 per cent of the diabetic population. We have been impressed, however, that many patients diagnosed as having "brittle diabetes" actually do not have it, and their so-called brittle state arises from improper control.

Numerous attempts have been made to explain this labile pattern. The recent invesigtations of Bornstein & Lawrence[1] and the work of Wrenshall[2] give basis for a plausible explanation. The lack of endogenous insulin in adults who are thin and subject to ketosis, and similar findings in juveniles, may account for this lability. As Ricketts has stated, "It seems likely that variable secretions of insulin for those who are able to accomplish it prevent rather than cause wide excursions of the blood sugar."

The brittle diabetic patient may be described as thin, often uncooperative, tense and at times depressed. His diabetes usually begins in the juvenile period and has been punctuated by hypoglycemic reactions with or without convulsive seizures. Diabetic acidosis may develop rapidly and the etiology of the acidosis is often difficult to explain. For this reason, such patients are frequently considered uncooperative and irresponsible. It is difficult to evaluate the role of the central nervous system in brittle diabetes. Therefore, psychotherapy and sympathetic understanding of the problem are an important aid in the therapy of this group. The juvenile patients must have cooperative parents with a clear insight into the problem confronting them.

Before discussing definitive therapy of the brittle diabetes, one should consider aspects that may contribute to the brittle state. After a thorough physical examination, the following conditions should be studied, as they may contribute to the labile pattern: Chronic lung disease, thyrotoxicosis, foci of infection, anxiety tension states, liver disease, incorrect diet, improper insulin absorption, and convulsive seizures. If any of the above conditions are present, adequate treatment may aid in establishing a more stable state.

Management of the brittle diabetic will be simplified if one considers several factors.

Diet.—Meticulous attention to the diet is of great importance. It seems to us that the carbohydrate content of the diet is frequently too high in such patients. If a lower level of carbohydrate intake and an elevated protein intake is prescribed, the fluctuation in blood sugar may be decreased. Carbohydrate levels of 120 to 200 grams seem adequate. The protein content may be raised to 120 to 140 grams, and fat for sufficient calories. Specific variations in the diet would depend on the severity, age, and activity of the individual patient. The distribution of the diet is likewise important. Various schemes have been advocated and the use of three meals with deductions from each meal for the evening lunch period will prove effective. Recently we have utilized a diet distribution of 25 per cent for each of four meals. Such feedings are given at 7 a.m., 12 noon, 6 and 10 p.m. Utilizing such a division of diet, with proper dietary education and accurate weighing of the food, a labile patient may assume a more normal pattern.

Insulin.—It is our opinion that the brittle patient will need two or more injections of insulin daily. If crystalline insulin is to be used alone, it then becomes necessary to administer it before each of the three or four feedings daily. Satisfactory control can be achieved by this technique, its only drawback being the use of multiple injections. The split insulin dosage technique has been employed in the treatment of most of our brittle

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diabetic patients. We prefer to use the intermediate acting insulin, such as NPH or Lente, in the following way: 60 per cent of the total dosage is given in the morning prior to breakfast; the second dose of 40 per cent is then administered after the third feeding. In some cases P21 or ultra Lente has been used for the second or evening dosage, and it may decrease the twenty-four-hour quantitative sugar glycosuria. If the before-noon blood sugar remains elevated, a mixture of crystalline and intermediate insulin is given as the morning dose. Thus, with various combinations of intermediate and crystalline insulin, administered at least twice daily and with wider distribution of the diet, we attempt to convert the labile patient to one relatively free from hypoglycemic reactions and hyperglycemic fluctuations. At times, such conversion is difficult and impossible in certain individuals.

Exercise.—The knowledge of the patient's activity and habits must be incorporated in the therapy. We outline certain exercise routines that are mild and compatible with his working and living habits. Perhaps this is a small detail, but to us it seems important.

Drugs.—Recently an effort has been made to utilize the newer so-called tranquilizing drugs in patients whose psychogenic make-up seems to indicate them. The use of Reserpine,® Equanil® (Meprobamine) and phenobarbital are important adjuncts in therapy of brittle diabetes.

Steroid hormones in brittle unstable diabetes have been advocated, but our experience with such drugs, although quite limited, has not been too encouraging. At the present time one patient is doing better with the added use of cortisone than at any time previously.

Education.—The education of patients and their families is quite important, and it is our aim that they understand thoroughly the problems of hypoglycemia and hyperglycemia. Not only does the patient test his urine for sugar, but also for ketone bodies, and if abnormal amounts are found, the patient is advised to seek help in order to prevent more serious episodes. Blood sugars are taken before each meal and at bedtime, and in addition the twenty-four-hour quantitative glucose is determined every second or third day.

The standard of treatment must be high in brittle diabetes. A blood sugar value of *near normal range* is advocated, consistent, of course, with the avoidance of hypoglycemia. Hypoglycemia is probably a more dangerous hazard than is transient hyperglycemia, as most cases of severe acidosis can be avoided if the appearance of ketones in the urine are promtly reported.

Summary

We have attempted to outline a regime that seems practical in a group of patients whose real problem and etiology is still unsolved. Naturally, each case must be handled individually. We feel it is important to employ all types of insulin in order to achieve this. The diet must be strict, high in protein, given frequently and, above all, of the same daily consistency as to time and quantity. Likewise, exercise should be regulated in the individual patient. A thorough understanding of the problem, its importance and ramifications must be realized by the patient and, above all, by a sympathetic physician.

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Bald and balding men have now been flattered to the point where they are probably going to be insufferable. Dr. M. Wharton Young, an anatomy professor at Howard University, has told the National Medical Association that baldness is caused by growth of the brain. It's a long chain of actions and reactions, but the upshot is that if you've kept your hair it's because your brain hasn't been growing.

This comes pretty close to saying a man who hasn't at least started to go bald has a case of arrested mental development. Anybody who still has a scalp that would be attractive to a Sioux is likely to be incensed about this, and want to see Dr. Young get his comeuppance. Be patient. He will. Just wait till the day the ladies ambush him. Dr. Young also said that the reason most women escape baldness is that they have smaller brains than men to begin with, and they don't grow very fast anyway.—*Detroit Free Press,* August 23, 1956.

Obesity and Diabetes Mellitus

By Rosemary Murphy, M.D.
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OBESITY is the most common physical abnormality in the United States[1] and, along with penalties in the form of discomfort, ill-health and increased mortality, it carries a great predilection for diabetes mellitus. In fact, every person who is at least 20 per cent overweight is a diabetic suspect.

For every obese individual who is known to have diabetes, there is probably at least one obese person who has the disease without being aware of it. In addition, there is an unknown number who are not diabetic at present, but, with the persistent burden of obesity, will become diabetic in five, ten, fifteen or even twenty years. If there is a family history of diabetes, or if the pregnancy record reveals spontaneous abortions, stillbirths, or large babies, the likelihood of diabetes, hidden or obvious, is greatly increased.

The exact nature of the relationship between obesity and diabetes is not clear, but Long[2] has offered a plausible theory based upon the participation of insulin in the metabolism of fat. Assuming that an individual who maintains a constant and normal body weight requires a certain daily production of insulin, it follows that one who has a caloric intake in excess of daily needs will require an additional daily production of insulin to be utilized in the deposition of fat. When this persists over a period of many years, it is not unexpected that eventually the pancreas is unable to provide an adequate supply of insulin. How long it takes for this to occur is probably a function of the degree of excess intake of food and the inherent capacity of the pancreas. At first, a state of relative insulin deficiency occurs. In this stage, a reduction in the demand for insulin by immediate correction of the caloric intake and eventual reduction in weight will re-establish an equilibrium between supply and demand. In other words, the diabetes is reversible. Eventually, however, with persistence of a relative insulin deficiency and intermittent or persistent hyperglycemia, the pancreas becomes exhausted and an irreversible stage develops. Diabetic symptoms occur and dietary management is no longer sufficient. An exogenous supply of insulin must be given.

If it is impossible, as it would seem at the present time, to get all obese individuals to reduce their weight to normal, it is certainly essential that the diabetic person in the state of relative insulin deficiency be discovered. At this stage, a routine urine examination, or even a fasting blood sugar determination, is inadequate, since many of these individuals will have no glycosuria and their fasting blood sugars will be normal. Every obese person should have a postprandial urine test for sugar and a blood sugar determination made one to one-and-a-half hours after a carbohydrate rich meal or after an oral dose of 100 gm. of glucose. Anderson[3] has suggested a six-minute responsiveness test to insulin as a means of detecting an early defect in obese individuals who may demonstrate a normal glucose tolerance test.

It is also important to remember that just because an obese person has been tested and proved not to have diabetes, there is no assurance that the disease may not develop six months, a year, five years, or even twenty years from the time of testing. The obese person is, and remains, a diabetic suspect as long as he continues to be obese.

The obese diabetic patient differs in so many respects from the thin diabetic patient that it is extremely helpful to be well aware of the characteristics usually found in the former group. Although all adults with diabetes are not obese, most obese diabetic persons are adult. The onset of the disease usually occurs after the age of forty years and the patients are predominantly women.[4] Approximately one-fourth of the patients give a family history of diabetes, while two-thirds give a family history of obesity.[4] The patient's past history usually reveals that obesity has been present for many years and, if pregnancies have occurred, there is frequently a history of early abortions, stillbirths, or babies with birth weights of ten pounds or over. In fact, the latter finding may serve as a clue to potential diabetes as many as ten to twenty years before the onset of the disease.[5]

Diabetes in the obese patient is usually stable

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in type. Often it can be controlled rapidly by reduction of dietary carbohydrates and the control maintained by reduction in weight. Ketosis rarely occurs, and in those individuals who require insulin, hypoglycemic episodes are not common. Even in those in whom a normoglycemia is not achieved, diabetic symptoms may not occur for many years.

It is this apparent toleration of hyperglycemia that has led to the mistaken idea that diabetes in the obese patient is "mild" and need not be given as serious consideration as diabetes in the thin individual. Actually, the obese diabetic patient is heir to all the serious complications of the thinner, more labile type. Eventually the disease, if uncontrolled, becomes "decompensated" and the classic symptoms of diabetes develop.

Recent investigations of the adult obese diabetic patient suggest that usually there is not an absolute deficiency of insulin. The extractable insulin from the pancreas at autopsy is approximately 50 per cent normal[6] and the plasma insulin content is about 70 per cent normal.[7] Presumably, these patients are in a state of relative insulin deficiency. The beta cells of their pancreases are unable to secrete sufficient insulin to meet the excessive demands of the fat depots, and, possibly, to overcome the action of one or more contra-insulin factors (growth hormone?, adrenal hormones?, insulinase?, glucagon?, and so forth). In some instances, if not all, this deficiency may be facilitated by a congenitally limited insular capacity.

Bearn, Billing and Sherlock[8] have shown that this group is characterized by fatty changes in the liver and hepatic insensitiveness as shown by a smaller fall than normal in the hepatic glucose output in response to insulin.

The treatment of this group of diabetic patients deserves special attention. A "laissez faire" attitude deprives the patient of an opportunity to avoid serious complications at some time in the future. Even if the patient is completely asymptomatic, he should be told that he has diabetes mellitus, not that he has a "mild case" or "a little sugar." He should be instructed in the essential features of dietary management, urged to check the urine regularly for sugar, and impressed with the importance of weight reduction. He must be informed that the program is not a temporary one to be discontinued when glycosuria disappears, but a lifetime project. He must be alerted to the fact that lapses in management with recurrences of hyperglycemia and glycosuria usually mean an increased severity of the disease and increased difficulty in management.

The recently introduced antidiabetic sulfonamide drugs, Orinase and Carbutamide,[9] have added new agents for treatment of this group of patients. Although there is still uncertainty concerning the mode of action of these drugs, it seems relatively certain that they are most likely to be effective in diabetic patients who still possess the capacity to secrete insulin. Consequently, they appear to have their greatest value in the treatment of patients in the obese group. The hypoglycemic responsiveness to these drugs can be determined in an individual patient by estimating the blood sugar before and four to six hours after a test dose of 2.5 or 3.0 gm. If the patient responds to the medication by a significant fall in blood sugar, then a trial of treatment may be given using 2.5 gm. on the first day, 1.5 gm. on the second day, and 1.0 gm. daily thereafter. If one of these drugs is used in the treatment, it is essential to remember the following points: (1) The medication is an adjunct to, not a substitute for, dietary management; (2) the patient must be kept under close observation for the development of toxic side effects, such as rash, leukopenia, crystalluria and possibly jaundice; (3) in the presence of infection, surgical operations, and especially with ketosis, insulin must be used, since the drugs, even in increased dosages, will not substitute for insulin; and (4) these drugs are not an easy way out in the treatment of diabetes; they should be used with caution and only in patients who have proved that they are faithful and dependable.

Summary

The obese individual remains a diabetic suspect throughout his life span. He should be checked frequently for diabetes and constantly guided in weight reduction. Diabetes in the adult obese person differs significantly from the disease in the thin adult. It is reversible in the early stages, but, if uncorrected, proceeds to an irreversible stage. In the early phase, weight reduction usually suffices for control. In the later stages, insulin is required. Some patients at this stage may respond to one of the new antidiabetic sulfonamides. At no time should the situation be treated lightly, and the

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Diabetes and Pregnancy

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IN THE pre-insulin era, pregnancy was a rare complication of diabetes because of the infertility of the diabetic woman. When pregnancy did occur, it was often interrupted early to avoid the high maternal mortality. The use of insulin has altered the prognosis. No longer is the maternal mortality prohibitive. Pregnancy occurs more often because of improved fertility and may be carried uninterrupted; however, the increased fetal wastage that was quickly recognized by the early workers has not been universally reduced to the nondiabetic level. Corrective measures combining assiduous diabetic control, careful prenatal care and early timed delivery have been successful in lowering fetal mortality. Female sex hormones have also been used in conjunction with the above measures. Maternal mortality has been reduced to the nondiabetic level, but the incidence of gestational morbidity remains higher in the diabetic mother.

The problem of establishing accurately the diagnosis of mild diabetes mellitus during pregnancy may be considerable. The diagnosis of severe diabetes is easy. The criteria established for the nongravid person must be altered to take into consideration the variable metabolic changes that occur during pregnancy. Any melituria should alert one to the possibility of diabetes mellitus and not be passed off without investigation as renal glycosuria or lactosuria. Blood sugar determinations are warranted in every case. Any elevation of the fasting sugar above 120 mg.* or any postprandial blood sugar above 200 mg. at one hour or 140 mg. at two hours should be considered diagnostic of diabetes. A patient with a borderline result had best be considered diabetic and managed accordingly until postpartum reevaluation can be accomplished. The case history is also important, and any mother whose baby's birth weight exceeds 4000 grams should be tested for latent diabetes, especially if a positive family history for diabetes exists.

In the past five years several large series of patients having diabetes and pregnancy have been reported.[1-6] We wish to record our experience with this combination and make some general and specific comments on the management of the individual patient. Pregnancy in the female diabetic population will steadily increase as more juvenile diabetic patients survive to maturity.

Material

Forty diabetic women having seventy-three pregnancies were treated at the Henry Ford Hospital between January, 1947, and June, 1956. All but seven were followed through their entire gestational period, including delivery, by the diabetic and obstetric clinics. Of the sixty-six pregnancies closely followed, our study covers the sixty-one cases carried to fetal viability. There were five early fetal losses.

Prior to the onset of diabetes, these forty women had thirty-two pregnancies, carrying twenty-eight to viability with a fetal survival of 78 per cent (twenty-two infants). This group had seven pregnancies observed elsewhere following the onset of diabetes. Three were carried to viability, but only one infant survived.

Of the sixty-one pregnancies followed, forty-two surviving infants were delivered, for a salvage rate of 68.8 per cent. There were nineteen fatalities, including fourteen stillbirths and five neonatal deaths. Our fetal wastage after viability was 31.2 per cent, a six-fold increase over a similar nondiabetic group. Some of the reasons for this tragic loss will be dealt with later. There was no maternal mortality.

Classification

Age.—At the onset of pregnancy, fifty-one of the sixty-one pregnancies occurred between twenty and forty years of age. Seven patients were under

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*—blood sugar figures indicate milligrams per 100 cc. of blood (Folin-Wu technique).

twenty and three were over forty. There were thirty-five white and five negro mothers.

Diabetes.—All forty patients had frank diabetes. In thirty-eight patients of this group, known diabetes existed at the onset of pregnancy, while

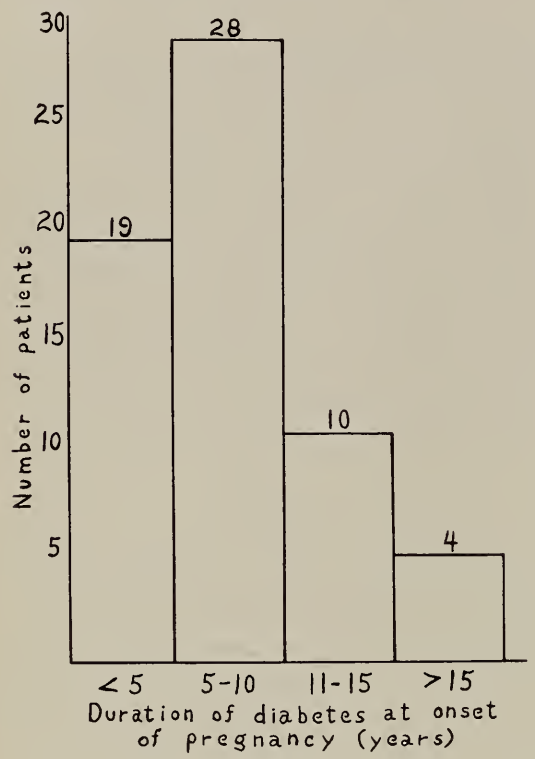


Fig. 1.

diabetes was discovered during pregnancy in two. Figure 1 indicates the duration of the diabetes at the onset of each pregnancy. It points out that 77 per cent of our series had diabetes for less than ten years. One patient had diabetes for twenty-five years and was delivered of a living baby.

Thirty-seven patients were on insulin therapy at the onset of pregnancy. Two patients required no insulin, and one needed insulin only during the gestational period. The effect of pregnancy on the insulin requirement was variable. Thirty-six cases required an increased amount during the gestational period; insulin dosage was stable in twenty patients, and five patients were able to decrease their insulin dosage. A composite average of the daily insulin requirement showed a 20 per cent increase during the prenatal period. The greatest absolute daily increase was 86 units (from 40 to 126 units).

White[7] has suggested a classification of maternal

TABLE I.
WHITE'S CLASSIFICATION AND FETAL SURVIVAL

Class	Number	Stillbirth	Neonatal	Per Cent Fetal Survival
A	4	1	1	50
B	26	7	0	73
C	23	4	3	70
D	4	1	0	75
E	1	0	1	0
F	3	1	0	66
Total	61	14	5	68.8

diabetes as an aid in the determination of fetal prognosis and as a guide in the management of the individual case. This classification considers the nature and duration of the maternal diabetes and the degree of maternal vascular disease paramount. From her experience, White concluded that the mother with early onset of diabetes and the mother with long-term diabetes and associated vascular disease presented the greatest hazard to the fetus. She also emphasizes the lesser though still significant risk in the "benign" adult short-term diabetic group.

Table I indicates the distribution of our patients according to White's classification and the respective fetal survival. The great majority of our cases lay in the adult or adolescent group. Our experience with the juvenile diabetic or the complicated vascular group (Classes D, E, and F) is meager. The two fetal deaths in class A represent twins born in the thirtieth week. Unfortunately, classes D, E, and F are too small to permit a comment on the validity of the classification. Its universal adoption has been urged.[8]

Given et al[9] have suggested total daily insulin requirement as a more cogent criterion in the determination of fetal prognosis. We have arbitrarily picked forty units daily as the division between "mild" and "severe" diabetes. The insulin dosage is based on pregravid requirements. Table II correlates fetal survival using this criterion. It illustrates the lack of influence of insulin dosage on fetal survival. We would not be able to prognosticate fetal risk using this criterion.

Parity.—There were twenty-two primigravida and thirty-nine multigravida patients in our series. Table III indicates the effect of parity on fetal survival. It should be noted that the fetal survival is lower among the primigravida than the mean. Classes A through C include 80 per cent of the primigravida, while 90 per cent of multigravida fall into these classes. Using insulin requirement

TABLE II. COMPARISON OF FETAL SURVIVAL WITH TYPE OF DIABETES BASED ON INSULIN

Types of Diabetes	Number	Still-born	Neo-natal	Per Cent Survival
Mild (40 units or less of insulin required per day)	38	9	3	68.4
Severe (over 40 units insulin required per day)	23	5	2	69.6
Total	61	14	5	68.8

as the criterion, 50 per cent of the former and 68 per cent of the latter were "mild" diabetics. There does seem to be some suggestion that parity improves the chances of fetal survival. In a larger series, this trend could well be negated or reversed.

Complications

Obstetric.—The high incidence of preeclampsia and polyhydramnios in diabetic mothers has been documented. Pernicious vomiting and abnormal placental implantation does not appear to be more common in the diabetic group.

Preeclampsia was diagnosed twenty-three times in sixty-one pregnancies for an incidence of 37.7 per cent. In this series it was diagnosed if any two of the three cardinal manifestations (hypertension, edema, albuminuria) existed. The one patient with pre-extising hypertensive disease is not included in this category. There were nineteen surviving infants, for a fetal survival of 83 per cent. Three of the fetal deaths were intrauterine while one was neonatal. The occurrence of preeclampsia did not adversely influence the fetal survival. Twenty of the twenty-three cases occurred in Classes B and C with one fetal death, while three cases occurred in class D with three deaths.

There were thirteen cases of polyhydramnios. In this small group, there were nine surviving infants (70 per cent). Like preeclampsia, polyhydramnios did not adversely affect fetal survival. It should be pointed out that ten of the thirteen cases occurred in the "severe" group, and a similar number were in Classes C and D.

Polyhydramnios and preeclampsia occurred concomitantly nine times, seven of the nine patients having "severe" diabetes. There were seven surviving infants, so this combination did not seem to be exceptionally lethal to the fetus. Four cases of combined ketoacidosis and preeclampsia occurred, all in patients with "mild" diabetes. There was one fetal death.

TABLE III. COMPARISON OF PARITY TO FETAL SURVIVAL

Parity	Number	Stillborn	Neonatal	Per Cent Survival
Primiparae	22	7	3	54.5
Multiparae	39	7	2	77.0
Total	61	14	5	68.8

TABLE IV. TEMPORAL OCCURRENCE OF KETOACIDOSIS AND ITS EFFECT ON FETAL MORTALITY

Trimester	Number	Intrauterine Death	Per Cent Mortality
First	2	0	0
Second	6	2	33
Third	4	3	75
Total	12	5	42

Five cases of pernicious vomiting of pregnancy occurred without fetal loss. There were two cases of central placenta praevia with one fetal death and one case of abruptio placentae without fetal loss.

Diabetic.—Ketoacidosis has long been recognized as a disaster of gestation, and the hazard to the fetus is enormous. White feels the fetus is most vulnerable during the second trimester. However, severe hypoglycemia has not been so implicated. Prenatal infections, particularly in the urinary tract, appear to be more common in the diabetic mother.

During the sixty-one gestational periods, there were twelve episodes of diabetic ketoacidosis in ten patients, an incidence of 19.7 per cent. Eleven of these occurred in Classes B and C and ten patients had "mild" diabetes. Table IV indicates the temporal occurrence of acidosis and its effect on fetal survival. It is obvious that no sweeping conclusions should be drawn because of the small number of cases, but it is interesting to note the greater hazard to the fetus when ketoacidosis occurs in the third trimester. In the five cases with subsequent fetal death, it was clear in each case that fetal death was closely related to the acidotic episode, but it is difficult to know what protected the seven survivors. There was no maternal mortality.

Hypoglycemia with unconsciousness occurred four times in three patients, two of these episodes being in the third trimester. There was no fetal

TABLE V. RELATIONSHIP OF GESTATIONAL COMPLICATIONS TO "INSULIN SEVERITY" AND ITS EFFECT ON FETAL MORTALITY

Complication	"Mild" (38 cases)		"Severe" (23 cases)	
	Number	Fetal Loss	Number	Fetal Loss
Preeclampsia	13	2	10	2
Polyhydramnios	3	0	10	4
Ketoacidosis	10	3	2	2

TABLE VI. RELATIONSHIP OF MODE OF DELIVERY TO FETAL SURVIVAL

Mode of Delivery	Number	Stillborn	Neonatal	Per Cent Survival
Caesarian section	34	3	1	88
Vaginal	27	11	4	44
Total	61	14	5	68.8

loss. The number of minor insulin reactions is not recorded. There seems to be no relation between fetal loss and severe hypoglycemia.

In addition to these recorded complications, three pulmonary complications, two cases of acute pyelonephritis and a gluteal abscess occurred during the gestational period. There were two cases of postpartum phlebothrombosis.

Table V indicates the relationship of complications, both diabetic and obstetric, to the severity of diabetes based on insulin requirement. It demonstrates the slightly greater incidence of preeclampsia in the severe group and the reciprocal occurrence of polyhydramnios and ketoacidosis. The reason for the higher incidence of polyhydramnios in the "severe" group is not clear, although a greater derangement of hormonal and electrolyte balance may be postulated. The high incidence of ketoacidosis in the "mild" group is interesting. As pointed out above, 60 per cent of the entire group required an increased amount of insulin during the prenatal period. In the small series with ketoacidosis, 75 per cent required more insulin. Poor patient cooperation is usually given as the most common cause of ketoacidosis, but the changing insulin need with resulting insulin deficiency may have played a role in the genesis of the acidosis. This experience points out one fact vividly—no diabetic patient is free from the risk of ketoacidosis, and no physician should be misled by the apparent mildness of the diabetes. All patients deserve careful observation during this stressful period.

Table V also emphasizes the greater fetal mortality when complications occur in a patient with "severe" diabetes. It has previously been shown that overall fetal survival is identical in the "mild" and "severe" group, however, when a complication occurs in a "severe" case, the chances of fetal loss increases more than twofold.

Mode of Delivery

Table VI compares fetal survival with mode of delivery. Thirty-four infants (56 per cent) were delivered by caesarean section. Four fetal deaths occurred. The low fetal survival (44 per cent) in the vaginal group is weighted by the election of vaginal delivery in seven cases of known intrauterine death. If these cases are eliminated from the analysis, a fetal survival of 60 per cent is obtained; a figure still well below the excellent record obtained by caesarean section. Three breech extractions occurred with two neonatal and one intrapartum death. Early timed delivery has been practiced during this entire period. Caesarean sections were done between the thirty-fifth and thirty-eighth weeks in twenty-seven cases (80 per cent), and nineteen times in the thirty-sixth and thirty-seventh weeks.

Female Sex Hormones

White has continually advocated the use of female sex hormones in the management of the pregnant patient with diabetes,[7,10] believing that their use has materially improved fetal survival. Others[11,12] have not been able to corroborate her findings. She recommends parenterally administered stilbestrol and progesterone in progressively increasing dosage. It should be pointed out that no worker has followed her outlined program exactly, usually lower dosage and the oral route being the major points of departure. Four of our patients were treated with short courses of oral stilbestrol in small dosage. Use of the female sex hormones did not detectably affect the course of the pregnancy in any case. No intensive parenteral hormonal therapy has been used.

Analysis of Fetal Loss

There was a fetal wastage of 31.2 per cent in our series of sixty-one pregnancies. Fourteen babies were stillborn, and there were five neonatal deaths. Previous mention of the relation of diabetes, *per se*, gestational complications, and mode of delivery to fetal death has been made. Five of the fourteen stillbirths were postacidotic, two were late gestational intrauterine deaths and one occurred in a premature twin. The other six were

either intrauterine or intrapartum deaths of undetermined cause. Table VII indicates the probable cause of death in the neonatal group. Congenital malformations are said to occur more often in the offspring of diabetic women. In our group there was one anencephalic monster, but no other major congenital malformations were noted. Three cases of hypospadias and one baby with cerebral palsy were encountered. There were three deaths following breech extraction. The potentially large babies would likely make this a hazardous mode of delivery. A composite average weight of the forty-two surviving infants is 3530 grams (seven pounds, twelve ounces). Of the surviving infants, 20.4 per cent weighed in excess of 4000 grams (about nine pounds) at birth. The largest living baby weighed 5630 grams (twelve pounds, six ounces).

TABLE VII. ANALYSIS OF NEONATAL DEATHS

Duration of Life	Type of Delivery	Presumed Cause
12 hours	Section	Hyaline membrane
1 hour	Breech	Anencephaly
6 hours	Vertex	"Respiratory failure"
6 hours	Breech	Subarachnoid hemorrhage
2 hours (twin)	Vertex	Prematurity

Discussion

The proper management of the pregnant diabetic utilizes sound principles of obstetric and medical practice. These principles as applied to the diabetic mother include good diabetic control, adequate nutrition, avoidance of significant ketosis and hypoglycemia, prevention of excessive weight gain and preeclampsia, and early timed delivery. The use of female sex hormones remains controversial, although the results with their use strongly suggest their efficacy.

Diabetic control is as important in the management of the pregnant woman with diabetes as it is in any other phase of the diabetic patient's life. Through good chemical control, the added risks of ketoacidosis and infection are minimized, and the chances of fetal survival improved. A basic dose of intermediate (NPH, Lente, Globin) or long-acting (Protamine-zinc) insulin is used daily with additional crystalline insulin as necessary. We do not favor any one insulin or combination thereof, but have found that sound understanding of the time action of the available insulins permits successful control using any type. The use of protamine-crystalline mixtures or an intermediate insulin has afforded the most consistently good results.

Proper chemical control is greatly facilitated by frequent office visits by the patient. A plan of biweekly visits up to the twenty-fourth-twenty-eighth week, then weekly visits until delivery is best. This allows frequent re-evaluation of the diabetic status and earlier diagnosis of insulin deficiency or complications. A record of the qualitative glycosuria at home should be kept daily and brought to the attention of the physician at each visit. During pregnancy a decreased renal threshold for glucose exists and must be taken into consideration in the management of the individual case. The degree of allowable glycosuria per twenty-four hours must be individually determined. A moderate glycosuria of 10 per cent of the daily carbohydrate intake is safe and satisfactory. More rigid control will greatly increase the hazard of repetitive hypoglycemia. Ketosis must be avoided. We feel the ferric chloride test for diacetic acid affords one a better estimate of significant ketosis than the more sensitive powder tests currently available for acetone. This test should be done when excessive glycosuria occurs and persists. Extra crystalline insulin should be given at once if diacetic acid is present. Insulin requirements during pregnancy will vary greatly between patients and even in the same patient. Close follow-up will detect these changes early and prevent disastrous ketoacidosis. Once delivery has been accomplished, decreasing insulin requirement in the order of the gestational increase is to be expected, and one must be alert to the possibility of postpartum hypoglycemia. Follow-up must be frequent until insulin stabilization has been reached.

Adequate nutrition is paramount for the pregnant woman. It is no different in the diabetic and can be accomplished with the same degree of ease. We prescribe a daily caloric formula of 30 calories per kilogram of increasing body weight. The protein intake should vary from 1.5 to 2.0 grams per kilogram per day. Carbohydrate intake should be adequate to protect against excessive ketosis but be restrictive enough to insure ease of diabetic control. We have found 150-230 grams daily to be satisfactory. A carbohydrate intake of less than 150 grams per day will invite undue ketosis. The amount of fat in the dietary formula should be sufficient to fill the caloric prescription. If excessive weight gain occurs without edema, the fat

intake may be curtailed accordingly. Supplementary vitamin intake is important as is daily oral iron. Because of the predictable increased risk of preeclampsia, the diet should be salt-restricted from the beginning. A "no-added" or 4 gram NaCl program is satisfactory. If edema occurs, the dietary salt may be further restricted to one gram per day, and acidifying salts and mercurial diuretics added. If frank preeclampsia occurs, immediate hospitalization is mandatory. In those patients with underlying vascular disease, the more restrictive program should be instituted initially. Hydramnios is occasionally prevented by the above program. Amniotomy is rarely necessary.

We have had no experience with the use of female sex hormones in the management of the pregnant diabetic patient, although four had short term oral stilbestrol. No conclusions can be drawn from this experience. White's extraordinary success and high fetal salvage rate in a group of high risk patients warrants careful attention by all interested in improving fetal prognosis. Many have felt that careful diabetic control and early delivery are sufficient to increase fetal survival to acceptable levels.[1-4,6,13] This subject still is highly controversial. It would seem justified to adopt her outlined program unaltered in selected cases in a further attempt to improve fetal salvage. The improved fetal prognosis would justify the inconvenience of daily hormonal injections. Weekly pregnanediol studies seem impractical in the average hospital.

Early timed delivery either by induction of labor and vaginal delivery or by caesarean section has been shown to be of value in decreasing fetal loss due to late gestational fetal death. Our series indicates the highly satisfactory results of caesarean section. This has been duplicated elsewhere.[6,13] Some feel early delivery has not completely rectified the high fetal loss.[7] The difficulty of assessing fetal maturity is well known and the hazard of delivery of an insufficiently matured infant is considerable. Accurate assessment of gestational duration is paramount in the use of timed delivery. Risk of fetal death rises sharply after the thirty-sixth-thirty-seventh week. The most favorable time for delivery lies just prior to this time. Immediate caesarean section should be performed if any signs of fetal distress become apparent. With a ripe cervix, a trial of labor might be justified. It is most important to individualize each case.

When timed delivery is elected, an early morning caesarean section is best. No supplementary insulin is given on the day prior to delivery, and one-half the basic depot insulin dose is administered on the morning of delivery. Intravenous glucose should replace the usual oral feedings, an infusion being given during delivery. Following delivery, supplementary insulin prevents excessive glycosuria. An adequate basic dose of depot insulin is then reinstituted on the first postpartum day, and a progressive liquid to full diabetic diet is offered the patient as tolerated. An alternate program of omission of depot insulin for twenty-four-forty-eight hours and the use of supplementary crystalline insulin has been employed with equal success. One must always remember that the insulin requirement following delivery usually falls proportional to the gestational rise, and one must avoid overzealous insulin administration.

No less attention should be given the newborn infant than is given the mother. The first forty-eight-seventy-two hours are critical. Hypoglycemia once was accused of being the major offender in neonatal loss; however, it is now well established that this is a physiologic occurrence in the newborn, and is more pronounced in the premature infant. Hyaline membrane disease and prematurity are the leading causes of neonatal death. Early establishment of an adequate airway by tracheal suction and gastric aspiration is important. Avoidance of overhydration of these edematous Cushingoid infants is mandatory, and oral feedings may be withheld for twelve-forty-eight hours. A humidified oxygenated atmosphere with postural drainage helps allay respiratory distress. Prophylactic antibiotics have been recommended. After the critical period has passed, formula feeding may be initiated as lactation complicates the management of the maternal diabetes. Then, too, successful lactation in the female diabetic is uncommon.

Sterilization and interruption of pregnancy were commonly employed in the pregnant diabetic patient prior to the availability of insulin. With the improvement in diabetic management and prenatal care, these radical procedures are less often indicated. Sterilization may be wise in the diabetic patient with progressive vascular disease where pregnancy is contraindicated. Interruption of pregnancy is warranted in those patients with rapid worsening of their vascular disease during gestation, especially in that group with proliferating retinopathy when blindness threatens. The use

of these procedures in the average diabetic mother is to be condemned.

Summary

Sixty-one pregnancies in forty diabetic mothers have been reviewed. After viability, there is a fetal salvage of 68.8 per cent in our series. The incidence of preeclampsia is 37.7 per cent, polyhydramnios 20 per cent, and ketoacidosis 19.7 per cent. The fetal survival was adversely affected by the last but not by the first two. Early timed delivery has been practiced during the time covered by this study. The overall fetal survival using caesarean section is 88 per cent.

Assiduous diabetic control and prenatal care followed by early timed delivery employing caesarean section appears to be the plan of management most likely to result in a successful outcome in the average case. The role of female sex hormones is controversial, but they probably should be used in selected cases. Sterilization and interruption of pregnancy in the average case are not indicated. Only by close co-operation between internist, obstetrician and pediatrician will the present tragic fetal loss be eradicated.

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CARBUTAMIDE IN DIABETIC PATIENTS

(Continued from Page 1203)

to be better controlled. If this trend is substantiated by further experience, it will remain to be decided whether the plight of an already obese diabetic patient is improved by making him fatter though aglycosuric or whether the improvement exists only in the mind of his doctor.

Summary and Conclusions

Two methods are described for evaluating the response of diabetic patients to the sulfonylureas, one suitable for use with hospitalized patients, and the other for outpatients. Both methods permit control observations to be made. The evaluation of patient response to hypoglycemic agents when controls are not used may be difficult and misleading. Three patterns of response have been demonstrated by each method—unequivocal success, unequivocal failure, and progressive improvement which persists for as long as two weeks following withdrawal of the drug. Patients who do not respond are unstable juvenile diabetics requiring relatively large doses of insulin. The most dramatic improvement in control is seen in mild obese diabetics of the older age groups who do not need insulin as a general rule. A final appraisal of the usefulness of the sulfonylureas in the treatment of diabetes mellitus cannot be made at the present time.

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Diabetes of Childhood

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THE JUVENILE diabetic is one whose diabetes began at fifteen years of age or under, and he now has the longest life expectancy of any diabetic patient. For this reason his training and early management must be the most complete. Hospitalization for a few days is extremely worth while and almost obligatory. We prefer to have the mother stay with the child for daily instruction and guidance. She is taught the calculation and preparation of weighed diets on the basis of food values. She learns to weigh the food, administer insulin, and test urine for sugar and acetone. Considerable time should be given to didactic teaching by the nurses and the attending physician relative to the nature of diabetes, the need for insulin, its mode of administration and time of action. The symptoms of insulin overdosage and its remedy and the symptoms of acidosis and the precautions to be taken during infections, all must be well understood before the patient leaves the hospital. This should prove to be the most important course in the child's lifetime curriculum inasmuch as with the proper attitude and understanding it will be much easier to keep his cooperation through the years to come. Such a period of training and indoctrination serves to allow for an optimum psychologic adjustment on the part of the child. We have all seen the diabetic child who, because of lax management, oversolicitation and indulgence by members of the family, has become badly spoiled and his disease is managed as he wishes. It is easier to teach the patient and the parents of one whose diabetes is of recent onset and who has had no treatment, for such a patient can be better taught to adopt and follow that regime which strives toward as perfect control as is possible.

Standards of Control

A great deal has been written about this subject in the past several years. Perfect control, good control of diabetes, or indifferent control of glycosuria without ketosis have all been advocated for this disease. Various groups of "purists" and "free-dieters" have reported on their statistical surveys, with the latter claiming little difference in incidence of vascular complications after ten, fifteen, or twenty years of diabetes. It is possible that the problem of degenerative vascular complications in diabetes is not a problem of control alone. It may be there are other unknown metabolic factors inherent in the disease itself, but until these are known we shall continue to treat diabetes in the young as energetically and with as rigid specifications as possible in each case. It is time consuming and requires an expenditure of effort, but a continuous attempt toward a "physiologic" control of any diabetic patient, especially a juvenile, seems to be only common sense.

There are many experimental reports to show that hyperglycemia is harmful. Sherrill[1] in a recent article lists a number of reports of the harmful effects of hyperglycemia and of dehydration with which it is associated.

It is said that, if the regime is not too strict and the control not too exacting, it is possible for the child to lead a more normal social life and that he will be less likely to develop psychologic disturbances and complexes. I do not feel our juvenile diabetic patients have become socially inferior or that they are malajusted, with rare exceptions. The complete standard for control of the juvenile patient is urine that is sugar free as much of the time as is possible, especially upon arising and at bedtime, freedom from ketosis and from too frequent and severe reactions, normal blood sugar levels if possible, an average gain in weight, and normal energy and happiness.

Nutrition

For the diabetic child to have optimum nutrition there are two important considerations. First, the diet must be adequate in protein, minerals, vitamins, and in total calories, and second, a high level of control of the diabetes must exist. In determining the growth and development of children with diabetes, Jackson[2] found a consistent tendency for growth to be normal or accelerated with the better degrees of control and to be normal

or less with fair or poor diabetic control. We have seen several children rather rapidly gain in weight and height with close control of their diabetes, who were underweight and stunted when a poor or less acceptable degree of control of their diabetes prevailed. Some have advocated a "free" diet, but such treatment is apt to be no treatment at all and to result in frequent glycosuria, hyperglycemia, and a high incidence of complications of an acute as well as a late nature. The "free" diet is mentioned only to condemn it.

The diet formula must be changed frequently to meet the changing demands of the growing child. The amount of protein used ranges from 2½ to 3 grams per kilogram of body weight. Schwarz[3] believes a high protein diet may be valuable in prevention and treatment of diabetic retinopathy. Its deficiency is believed by some to increase the incidence of nephropathies in the juvenile patient with diabetes. The amount of carbohydrate used varies widely depending chiefly on the size and age of the child, ranging from as little as 80 to 90 grams a day for an infant or younger child to 180 to 225 grams for the adolescent. Some clinicians provide 50 per cent of the total calories from carbohydrate, 15 per cent from protein, and 35 per cent from fat. This seems to provide more carbohydrate and less protein than we believe is advisable. With an unusually high carbohydrate level, a need for a large insulin dose is created bringing with it the threat of hypoglycemia and, most important, the sacrifice of good control.

With regard to fat in the diet, we may say that the diet must be palatable and should contain an adequate quantity of milk and butter. If hypercholesterolemia exists, the fat should be made quite low. The diet should be weighed if at all possible. Many times when it is inconvenient or impossible for the school child to get home at noon, it is better to allow him to estimate his meal in the school cafeteria rather than have him carry a cold and unappetizing meal from home. The well-trained and cooperative child will not take advantage and use this as an opportunity to cheat. Children are encouraged to weigh their own food. In doing so they become more self-reliant and come to have a better knowledge of portions and exchanges.

The mother must know to reduce the diet by one-half or one-third in the event of an acute infection and a febrile state. The question of food between meals is important with the smaller child. The preschool child should have 100 grams of milk of a midmorning and mid-afternoon and this will provoke no upset in control. The taking of 15 grams of carbohydrate at bedtime is generally considered advisable with the use of protamine zinc insulin. Young people enjoy the privilege of eating such an amount of food after an evening party, dance, or sports event, and this has good psychologic and social advantages in preventing an inferiority complex of the diabetic youngster. The taking of extra carbohydrate food is a "must" preceding periods of unusual strenuous exercise such as swimming and basketball.

Insulin

Every diabetic child requires insulin continuously from the day of diagnosis of the disease. Protamine zinc insulin finds its greatest usefulness in juvenile diabetes, because of the unfailing occurence of hyperglycemia during the night in the diabetic child. It is common knowledge, however, that good control is not possible with this or any of the present-day insulins alone. The preferred method is the use of separate injections of unmodified and protamine zinc insulins before breakfast and frequently unmodified insulin before supper. Except where supplemental unmodified insulin is used, our experience with the use of the so-called intermediate acting insulins, such as NPH and Lente, and insulin mixtures has been repeatedly disappointing in the child. In our hands, the use of these has resulted in an increased instability with loss of carbohydrate tolerance. Such is the impression of others.[4]

The dose of insulin appears to depend largely upon the age and body weight of the child. It is questionable whether the disease in children is more severe as is frequently stated, if severity can be measured by insulin requirement. Certainly it is true that the disease is more labile and brittle in the child and that without treatment it is likely to terminate fatally in a short time. As years go by, the diabetic child requires more insulin and this is largely related to increase in body weight. During the years of active pubertal changes, the child usually requires relatively more insulin and a diminution may occur during the later "teen" years. With an insulin dosage of 15 to 35 units and an adequate diet, a child can be maintained in good control. Those children who seem to require a considerably higher dose

of insulin are obtaining extra food over and above their diet, or the diet prescribed is wastefully high in its carbohydrate allowance.

It is our impression that undue importance is given by many to the desirability of reducing the number of injections of insulin which the child may need to obtain a high level of control. It will usually require three and occasionally four daily injections of insulin to maintain the more labile diabetic child to our standard of control. Every school child should be spared the use of insulin at noon, but further to reduce the frequency of injections with a sacrifice of a good level of control seems unwise.

There is a great deal to be taught the parents about the intelligent use of insulin besides its actual administration. It should be stressed that insulin must not be discontinued because of nausea or vomiting in the event of infection or other complication associated with fever, and that the insulin requirement increases sharply during infections. Regardless of the fact that the child may be taking little or no food, the parents must be alert to give extra doses of insulin promptly if glycosuria increases and is accompanied by acetonuria.

At the time of this writing it is generally agreed that the use of oral antidiabetic sulfonamides has no place in the treatment of diabetes in children.

Physical Activity

It is our objective in the management of diabetes to maintain as nearly normal physiologic conditions as is practical. In many clinics the diabetic child is permitted to maintain a mild degree of glycosuria as insurance against shock. This would seem to be a level of only fair control. Exercise is essential for wholesome living and physical development of the young, and we feel it should be permitted and encouraged to the same extent as in the nondiabetic child. When boys and girls become adolescent, the differences in activities of the two sexes are accentuated. After puberty, girls tend to spend more time in leisure while boys frequently spend more time in greater muscular activity both in work and leisure. The lack of exercise in many adolescent girls is no small factor in the frequent occurrence of obesity in this age group.

Only rarely should the insulin be reduced in anticipation of additional physical activity, but rather it should be urged that additional carbohydrate be given between meals or at the time of the exercise to compensate. In general, the school routine tends to maintain the activity of children fairly constant during the school months. However, the change in requirements necessitated by week-end and vacation period activity must be provided for. Jackson and Kelly[5] reported a study of eighteen subjects ranging in age from three to twenty-two on whom careful blood sugar values were observed during periods of strenuous, moderate, and minimal activity. Their findings have shown what others have frequently observed, namely, that in well-regulated children the decrease of blood sugar was small and not accompanied by evidence of clinical shock. Certainly it has been our experience that severe reactions occur most often in the case of the child with poorly controlled diabetes, who most of the time has heavy glycosuria and who suffers reactions because of violating rules observed by the well-trained, well-controlled patient. This would tend to refute the belief that the best way to prevent hypoglycemic reactions in children is to permit them to carry a high level of blood sugar.

Hypoglycemia

Although we strive to avoid hypoglycemic shock, this should not be the paramount issue in the managment of the diabetic child. We strive for a level of control which will result in a few reactions from time to time and, if these are not too frequent and too severe, the insulin dose is not reduced. The subject of hypoglycemic shock may need to be "soft-pedaled" in the instructional program to the parent. Otherwise, the imaginative and oversolicitous parent may find it difficult to think of anything else other than avoiding a reaction in the child and the proper standard of control may never be achieved. It is our aim, of course, to avoid the more severe shocks which upon rare occasions may seem to occur without due cause. Parents must learn that mild reactions in the child may be difficult to recognize at times. Listlessness, negativism, peevishness, circumoral pallor, and strabismus, are signs and symptoms common to the younger child. Rarely convulsions with or without repeated vomiting may occur at night, and for this reason it is good practice to provide each household where there is a diabetic child with one or two small ampoules of 50 per cent dextrose which the family physician

can administer by vein immediately upon his arrival in the home.

Diabetic Coma

The overall incidence of severe diabetic acidosis and coma in the child is considerably less than it was. It is now rare that a child whose diabetes had not been previously diagnosed is admitted to the hospital in a state of coma. It is because more physicians are conscious of diabetes and are recognizing the disease early, and because parents of known diabetic children and the children themselves are possibly better trained that the incidence of coma is being reduced. The fact remains that coma still occurs and possibly always will. Its onset is more rapid in the child, but the signs and symptoms are largely the same. Treatment is much as it is in the adult, consisting chiefly of adequate insulin, fluids, and gastric lavage. The amount of insulin depends largely on the age and the initial blood sugar level. Circulatory collapse rarely occurs in the child. Prognosis for recovery is 100 per cent, unless complicated by severe infection or unless the patient is moribund at the beginning of treatment. Potassium administration in the recovery stage of coma in the child is relatively less important than in the adult. By reason of having young and healthy cardiovascular systems they are better able to withstand upsets in electrolyte balance.

Vascular Disease

For reasons that are apparent, many more juveniles with diabetes survive than did twenty-five years ago. As in the adult whose life expectancy is constantly being extended, the child diabetic is living long enough to develop degenerative vascular disease. Several excellent reports on the incidence of vascular complications in the patient with long standing diabetes, and the statisical relationship of incidence to level of control of the diabetes have been published.[6,7] These studies unquestionably point up that energetic and intensive treatment tends to control the specific etiologic factors causing degenerative lesions in the person with diabetes. These reports also strongly support the belief that degenerative vascular disease in the patient with diabetes of ten to twenty years' duration is a complication and not an inescapable and inherent part of the disease. Many of us have seen retinae of a diabetic person which have been literally plastered with small hemorrhages to improve markedly with better control of the diabetes. While control is probably the greatest single factor known today in avoiding or retarding degenerative vascular disease, it is only one part of the problem. It does not explain why a few whose records show continuous poor control seem to have developed little if any vascular disease after fifteen or more years of diabetes. Perhaps there are other metabolic disorders operating along with or even independently of diabetes. Until more of this is known, a high level of control appears to offer the best means of averting or delaying vascular changes.

Summary

The management of a juvenile diabetic patient resolves itself into just as careful day by day control of the condition as can be obtained. Compromises with ideal treatment must often be made because of practical consideration; however, these need not allow one to lose sight of the goal which is to bring about physiologic conditions in so far as is possible. Only in this way can the degenerative complications be prevented and the diabetic child be enabled to live out a useful life span approaching that of the nondiabetic youngster.

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Geriatric Exercise (Activity)

How to Exercise and How Much

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ONE of the panels at the convention of the American Medical Association in Atlantic City, last year, bore as a distinguished member that great old warhorse, Dr. Walter C. Alvarez. His ready wit, baby-pink face and active participation made him the star of the show. He accomplished his aims by explosive advice, pointing his arrows to impress *one good summary fact* upon the minds of the *uninitiated* and the *immature*. After the panel was dismissed, I ambled twelve blocks up the board walk to my hotel. There, swinging along, pacing firmer and faster than all the rest, was Dr. Alvarez. I said, "You're ahead of the scooters and everybody else." He whizzed around at the sound of me and replied laughingly, "Hell, yes, and I'm not even half trying!" That from one who can be classified in the eighth decade of life. Dr. Alvarez mentioned winding up the biologic clock for a good life's span. He is, apparently, well wound.

Dr. Walter Biering introduced the speaker at the Billings lecture. With marvelous memory, he recited the names of the distinguished Billings speakers for the past generation, designating year, place, subject, offering all facts with enthusiasm and relish. Though his body is crippled, his mind is untrammeled in his ninth decade of life. I have seen him perform equally well at the annual Alpha Omega Alpha banquet.

Reflections

As a youngster, in my small town of southwest Ohio, I began to read and write in the gay nineties. Struggling to put words together, I was confronted by the introduction of the personal column in our newspaper, which was read by the oldsters. It ran something like this:

> Doings of dale, dell and dingle;
> Mine of many matters, muchly minted.

I begin to fear that the rehashing of muchly minted geriatric facts will place you all in your dotage or in your dreams. In that case, my remarks regarding *geriatric exercise* will wander among personalities and not with tables, slides, columns and curves.

Older Art

Guess who said, "If I had not taken up painting, I would have raised chickens, and if the chickens had died, I would have accepted guests to eat my pancake suppers?" If you cannot surmise, let me at least hint that she was not found among the bulrushes! I have never asked this nice old gal if she takes setting up exercises in the morning. If there are Indian clubs in her home, she probably employs them to stir up the paint pots. Wouldn't it be a funny sight to see her on TV, in bloomers, lying on her back and kicking up her legs and heels in reversed bicycle fashion, at the command count of one, two, three, four, before twenty-five million observers and participators?

The Physician Attempts to Keep Up

In New York City, we enjoyed the play, "Tea House of the August Moon." Here the military in Okinawa had for one of its aims in plan "B" to *orient the Oriental.* One of our hopes each year is to *geriatrize* the *geriatrician.* In other words, we do hope that some day the older doctor may try to catch up with his elderly patients, if he must chase after them on roller skates and pull himself up to their level by hanging on to their coat tails.

The Fetus and the Mountain

My father once told me the tale of the unfaltering fetus, describing it as such a hard working little devil that it arrived into this world all out of breath, because it had been growing so fast. He stated that if growth after birth had continued at the prenatal acceleration, each one of us would be as large as the Rocky Mountains. There was this hint, that as we grow older we do not need to run after subways or to speed up the traffic, grasping at vanishing rainbows. However, neither do we want to lie as still and

somber as a mountain. Somewhere, we slowed down, but nowhere did we stop, unless perchance a coffin lid got nailed down upon us, when our collective back was turned.

Age Still Admires

Going back to the play about the August Moon, there was the question regarding the old man of Okinawa, admiring a beautiful Geisha girl. The American novice expressed noticeable surprise, but the Oriental interpreter explained readily, "Ah, this man is merely old. He is not yet dead!"

Elderly Students—Association of Ideas

Before I had ever set foot in a college hall, I was plunged full blown as a village school master before a motley assemblage of blue-jeaned doubting Thomases. As the year of 1909 advanced, one of my great themes was the *association* of *ideas* to establish *keen memories* of related facts. The children were to invite their grandparents for a Friday afternoon exhibition. The seventh graders were to teach the long-beards a class in geography, as a demonstration exercise.

All but one declared that old folks were too senile to learn and too crippled to come. One redheaded girl kept her silence.

The great day arrived and all of the oldsters invited came to class one hundred per cent, canes, crutches, stiff joints, spotted spectacles and all. From their leisure, they had sprung at such a tempting morsel. The subject was Ethiopia and the name of the capital, Addis Ababa, was brought up. A protest arose "We can never remember it." The redhead arose in dignity and told this tale:

"A childless Italian couple prayed each Christmas for a family, but all in vain. The sad years rolled by, and now desperation was upon them. One Christmas Eve at midnight, the door bell rang and papa peeped out to investigate. When mamma arrived, there she found her spouse kneeling in the snow, clasping his fervent and expressive hands over a basket of down and ribbons. 'What is, papa?' was the inquiry. Papa gleamed in religious ecstacy and ecstatically replied, 'Ah-dis-a-baba'."

That brought down the house, but all of the oldsters remembered their geography lesson to their dying day. The moral, of course, is to *get out* and *go* and to *go in* and *learn*. An enticing abundance of exercise awaits both body and mind.

The Quakers

The ancient Quaker lady in a poll told the investigator of her elderly aims in life:

Somewhere to live;
Something to do;
Someone to care.

The *"something to do"* can cover every field from gardening to the morning walk, to a hobby shop, to writing a book, to creative dramatics, to a rocking chair—to a wiggled toe of the paraplegic.

Classification

Since I cannot be arrested by an officer of the law for making a false statement here, I may even avoid further manhandling by hitting half on the truth. It seems to me that citizens of the mature years can become reclassified into about three groups to continue their adventures through the remainder of their lives.

Youngsters

While I am not flattered to begin at sixty-five years, since that age picks at my bones a bit, I shall take a stab at it. Let us speak first of the *youngsters* from sixty-five to seventy-five. The majority of such people, if health is at all decently preserved, can continue right on doing what they are doing, probably easing off intensity of vigor about 5 per cent a year.

Doctors, lawyers, professors, mechanics—all have a *joy of life* by a *joy of doing*. Many physicians in their seventies are wisest in their counsel and most meticulous in their gardening and other vocational proclivities. Their *setting up* exercises cover *sitting up* in bed and getting dressed in their old clothes for a good garden sweat before a shower, breakfast and pressed clothes send them forth to fight their way among the lame, the halt, the half-blind and the semi-conscious.

Travel.—Travel is still a keen energy dispersal in these fuller years. Dr. Hugh McDowell Beebe relates his experience in the Riverside Hotel at Ft. Lauderdale, Florida. A *"Rubber-neck Boat"* was cruising along the shore. The doctor and his conversational companion paused in their lingering over their mutually glorious pasts, when the man with the megaphone crooned these words over the waters:

"This is the Riverside Hotel, the home of the newly-wed, the overfed and the half-dead. Do you see those

two old geezers over there? They are just sitting there, listening to their arteries harden."

Well, this first age group deserves more than that.

Silversmith.—Dr. Udo Wile of Ann Arbor, Michigan, is a dermatologist of world renown, but as a silversmith, he causes the shades of Paul Revere to look to their laurels in true alarm.

Lapidarian.—Our own chemical engineer, Walter Badger, international consultant, flies the seven seas on his many missions, but when back in Ann Arbor he becomes again the lapidary of no mean ability, probably not in the Cellini class, but good in the minds of many. He and his wife are prize gardeners, in addition to becoming exquisite flower arrangers.

Vase Maker.—Please note this fine formula for the amateur vase maker. Mix equal parts of powdered dry molder's clay, Portland cement and Whiting powder of water-mix masonry paint. Blend and work in water to a putty texture; shape, carve, dry and later paint. Some oldsters have steamed these forms and sanded them down to a fine finish. Any plain color or varied design will do. *Worth trying.*

Geologist.—Here let me recite the tale of the elderly man whom I met over the hat check counter. He checked hats and coats flawlessly, but in confidential tones, just to me and to no one else, he whispered his theory of the world's rotation:

"A cylinder of granite, twelve miles in diameter, is the axis of this world, and perfect rotation is soon to be stopped with a hot box, when the oil wells drain out all the lubricant!"

I directed him to the library of the University's Geology Department. At first he objected to everything. Then he became an ardent student. Now, the axis story has become rather diffuse, and he lectures long and juicily on more acceptable theories.

His *short dashes* after hats and coats, and his *long dashes* after knowledge, have exercised him into a beaming-eyed old laboratory specimen, indeed.

Please understand that I do not oppose the star gazer's stance, the deep breathing exercises, the belly roll and the reversed bicycle kick in bed, but this old fellow does not need them—yet.

Job Seeking.—A vigorous man retired against his will, handicapped or otherwise, with financial responsibilities that must be met in the near future, cannot be coddled with advice regarding his morning exercises. Rather, we must rise to the occasion of his needs with advice concerning taking stock of self and skills. Also, we might urge night school enrollment to seek perfection in other fields. For the hundred or more job suggestions, see Juliette K. Arthur's new book, entitled "How to Help Older People." Page 418 will do the trick.

The Handicapped.—If you have old clothing, discarded furniture and appliances, piles of magazines or dusty books, call the Good Will Industries, and a truck will shortly arrive at your home. Restoration and re-sale will be conducted by and for the handicapped.

One of my undefeated trout fishermen dwindled to a wheel chair. His enterprising daughter whisked him and his collapsible chair up north, just the same, to the old cottage. She built him a walk along his favorite rapids. There he cast as before, and occasionally brought in a shiny form.

The scooter, the arthritic, the golf course also form a challenging combination.

When the automobile crowded out the carriage trade, the president of our carriage factory suffered bankruptcy and a stroke. The Maxwell-Chalmers Corporation took over the factory. In readjustment, the former millionairess now became the secretary to the new manager and the former president, now dragging a bit, became the night watch. But the town applauded.

Partial Retirement.—Factory workers, forcibly retired, yet in good health and purse, can now seek part-time employment, and for the first time in their lives take stock of their physical and mental resources. They do not have to find violent exercise, but they may compensate with the joy of new adventure. There is the opportunity to join a group of dubs in easy golf. One can loll at the swimming pool. Constructive hours may be passed in clay or soap sculpture, wood carvings, model making and the creative arts, such as basketry. Then there is the rockery, with its nodding "baskets of silver" and "baskets of gold."

Also, don't forget the thrilling adventures

among self-made woodsy paths and bosky dells. Lastly, there is the leisurely hike through the woods.

An authoress had sent her children off to school and then dived immediately into her script. With the typewriter clicking, she was full of consternation to hear a knock at the back door. There an elderly colored man poured out the honeyed words regarding his partial retirement and present assignment of knife sharpener. He stated: "I'm more prosperous at eighty-six than I was at forty-six. I owe it all to my mother wit." After sixty cents worth of activity and a cup of tea, he suggested that he sharpen her kitchen knives. "But," she said, "you just finished the job." "Oh," replied the old sage, "my reminiscibility is sure a-slippin."

The Coronary Patient.—The coronary patient with good reserve has but to take off a few months to heal his wounds and then continue much as before, with, say, a further 10 per cent reduction in physical demands. We would not ask him to push a car out of the mud or to dive off a bridge to save a life. He can explain his problem with proper dignified apology to the drowning victim.

Middle Age

Let us hasten on to the *second* large group of oldsters, the age from seventy-five to late eighties. We can designate *middle aged* as the term. Many still maintain their homes. Activity in work or exercise is now at 50 per cent former demands, yet there can be joy at hand.

I have many such splendid old people, who say "I like to dig the garden and mow the yard, but my daughter gives me a tongue lashing for doing it!" I say, "You have outlived your diseases, two-thirds of your enemies, and now all you have to do in life is enjoy that good time, and stuff cotton in your ears to dodge the tongue lashing." Such a one asked only to live old with honor and die without pain.

Meeting Disaster.—One old man at eighty-eight told me that this old age thing in his own home was very nearly perfect, when suddenly he became a widower, he lost his fortune, and his vigor withered. Now he was in a pickle. The only thing to do was to recognize his dilemma, take stock of mental and physical resources, move in with the in-laws and become an old man, indeed.

But the partial care of the yard was still his, by my command, as long as he relished it in the life yet spared. His daughter wailed, "But he might fall dead pushing the mower!" I hushed her with, "Then we will call the undertaker, but until that event keep that beautiful mouth of yours wagging over a different subject, such as the petting problem of your seventeen-year-old daughter."

The Farmer.—A semi-retired farmer and his wife point to the most ideal existence, with *chore patterns* to their exact liking.

Homes for the Aged.—At this juncture, if the daughter's home or "Grossdawdy" wing or "Manor Suite" or "dower room" or "The Southwest corner," were not available, one should be compelled to consider a dwelling for the aged. This could include *county farm* type or *nursing home* or cottage grouping about a central *"home base"* building. Here we may hope to find an *"airing yard,"* activities room, craft shop, theater for the old folks, orchestra pit and other intriguing entities. Where one is too feeble to participate, then a wheel chair will, at least, act as a delivery bus to enjoy the performance of others. Many of these principles apply even in a so-called mental institution, with chores assigned and square dances permitted.

I once saw an old bed-fast lady, far in her dotage, directing an orchestra of small children participants, through her bedroom window. Whatever the dilemma, there is the opportunity for some degree of action or exercise as long as the heart beats.

This Old House.—John Quincy Adams was once walking down the street, late in his serene life. A neighbor asked into the state of his health. Mr. Adams replied:

> "John Quincy Adams is fine, but this old house in which he dwells is dished in the timbers, and the present occupant is about to evacuate the premises."

The Theater.—An elderly retired man bemoaned his general lack of interest in things physical and cultural. He dully accepted a ticket from me to hear Lillian Gish, when she was in Ann Arbor recently. As the show progressed, he

began to perk up. At the last curtain, he said to me enthusiastically:

"I'm going up stage and to her room. I'm going to look her in the eye. I'm going to clasp her hand, and I'm going to say: 'Gosh, Gish'!"

The Oldsters

In the *third classification* of *the oldster;* I finally admit the existence of old age. These people are in the nineties, and though we hope for all of them to make it to the bathroom and enjoy *self-care,* our ideal is apt to fail. Let us face bed invalidism. *One chair* or *a dresser* from the *former home* surroundings may become *home base* for this otherwise wretched soul. The daily bath, the massage, the exercises I scorned for the amateur geologist may now come to the front.

Bedside Commode.—If at all possible, the bedside commode becomes a distinct victory over the bed pan. The wheel chair trip to the bathroom is still a more constructive performance. If self-care is not entirely possible, then an attempt in that direction is always in order.

Passive Exercise.—Physiotherapy, hot packs to stiff joints, the back rub, mild application of infra-red therapy, whirl pool, Rock-a-beds—all may become a substitute for active exercise. Let there be no lost hope. As long as a man can grow a beard, he is still on the map.

Tall Tale.—Dr. Blodgett of Detroit tells this tale of an elderly invalid about to leave his oxygen tent. The doctor told the nurse to have a chair ready, as things were now going to hum. The doubting and fearful old patient mumbled:

"Nurse, you'd better get two chairs ready, one for me to set in and one for rigor mortis to set in!"

The Artist.—I have been inspired, indeed, by a nice old lady in her nineties. She is bed fast, unless one lifts out her stiff and rigid body. Her hands are deformed with ulnar deviation of her twisted fingers. Yet, when I suggested finger painting, she finally acceded to what appeared at first to be a silly suggestion. Her friends send her picture post cards, which she enlarges and roughs in on a grand scale. I have even bribed the neighbors to purchase some of her "master pieces" at a dollar each. Dull days are now become rainbow hued in a newer world. The barbiturates have been lost somewhere on a darkened dusty shelf.

This fine old soul has prepared me an approach to a ditty, to describe her reaction to the principle that exercise or activity are life blood to the aged.

Though my spine is stiff,
And my joints are frizz,
And I can barely wiggle,
Just rub me down,
And paint me up,
And listen to me giggle!

Such a constructive Humpty-Dumpty!

Noch Habe Ich

In 1918, mid-November, shortly following the Armistice of World War I, I made a hasty trip into Germany. At the confluence of the Saar and Moselle Rivers, I stopped to greet an old German woman. She possessed a small acreage with vineyard, pasture, garden, little white cottage, a wee barn, a cow, a goat and some chickens —all of which she cared for herself, employing a considerable amount of grit and Teutonic spunk. She told me, as best she could, that her three middle-aged sons were killed in the war, and that her husband had died with a stroke. I expressed sympathy by remarking: "Alles ist gegangen."

She pointed to the sky and the weeping willow tree, not yet shrivelled by frost and drew herself up proudly, as she replied:

Noch habe ich, Himmel-blau
und Dunkelgrün!

As long as color and beauty were still with her, life was not yet lost!

I have often quoted this brave old German grandma as a *missionary in absentia* to the downhearted and the elderly downtrodden.

Summary

In this discussion, it has been my ambition to describe exercise and activity programs for elderly patients.

In lieu of charts, graphs, and curves, I have presented actual personalities, indicating possible expectations of response.

To the young physicians, I would urge an interest in the geriatric personality. If proper *soul relationship* exists, there will be fewer problems to concoct proper advice regarding *individualistic exercise.*

Let the ordinate and abscissa of your scientific graphs have their origins in the Id of the patient.

Noch Habe Ich—!

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patient should be encouraged to remain under medical observation indefinitely.

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Medical Ethics

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BEFORE presenting a discussion on what constitutes ethics in medicine, I re-read the oath of Hippocrates, the code of ethics of the American Medical Association (it is printed in the preface of the AMA Medical Directory), and delved a bit into what constitutes a profession and how one should conduct himself therein.

Business vs. Profession

What is the difference between a business and a profession? I found this answer. "The essential of business and industry is that its only criterion is financial return. The essential of a profession is that no man enter it solely to make a livelihood. The measure of his success is the service which he performs, not the gains which he may amass. One may grow rich as a successful professional man; but the meaning of his profession both for himself and the public is not that he make money but that he make health, safety, or good government or good law. He depends upon it for his income but he does not consider any conduct which increases his income is on that account good."

Times are changing. A one hundred thousand dollar practice is big business, and its finances must be watched carefully. On the other hand, many commercial enterprises are requiring a post-graduate course for their young prospective leaders, and this later training must perforce instill certain ethical concepts.

It is apparent that there is need for re-emphasis of the old standards.

It is not hard to find the career of the practice of medicine described in very lofty sentiments. One has only to turn to page one of Harrison's *Principles of Internal Medicine* to find the following: "No greater opportunity, responsibility, or obligation can fall to the lot of a human being than to become a physician. In care of the suffering, he needs technical skill, scientific knowledge, and human understanding. He who uses these with courage, with humility, and with wisdom will provide a unique service for his fellow man and will build an enduring edifice of character within himself. The physician should ask of his destiny no more than this; he should be content with no less."*

The code of ethics of the AMA says the same thing in the following language: "The prime object of the medical profession is to render service to humanity. Reward or financial gain is a subordinate consideration."

The Hippocratic oath has been described as having "no parallel in the history of morals." Detailed rules for priesthood, for example, usually have to do with ceremonials rather than ethical matters. Other professions do not begin to codify such matters in such positive language. "I will use treatment to help the sick according to my ability and judgment but never with a view to injury and wrong doing. Neither will I administer poison to anybody when asked to do so nor will I suggest such a course. Similarly, I will keep pure and holy both my life and my art. I will not use a knife on sufferers from stone but I will give place to such as are craftsmen therein. Into whatsoever houses I enter, I will enter to help the sick, and I will abstain from all intentional wrong doing and harm, especially from abusing the bodies of men and women, bound or free." (The Hippocratic Oath.)

Specialization

The sentence about "not cutting for stone" and referring the patient "to craftsmen therein" is a whole sermon on the golden rule in treating your patients. As specialties differentiate and gain prominence, certain groups of men develop skills and clinical experience which others do not have. We are long past the stage when any one physician or surgeon is good for "the skin and its contents." There is general appreciation of this today, although there was not a generation ago. Some months ago a resident in another hospital said to me on early morning rounds, with a bit of a

Address given to the incoming interne-resident group, Sinai Hospital, Detroit, Michigan, July 2, 1955.

*Harrison, T. R.: Principles of Internal Medicine. Blakiston Co., 1951.

tone of disguest, "I learned what not to do last night. I watched a general surgeon fuss with a fracture for almost two hours, when any orthopedist on the staff could have done the same job much better and in fifteen or twenty minutes." This remark could be elaborated upon. Can you take out a tonsil as well as a nose and throat specialist? Do you know the pathology of the pelvis and therefore the therapeutic indications and the prognostic possibilities as well as a practicing gynecologist? *Per contra,* as a gynecologist are you familiar with the pathology of breast tumors, and the controversial indications for radical mastectomy? Are you completely familiar with the exacting care of a patient in diabetic coma or must you rely on the newer knowledge of the medical resident in the hospital? A host of personal queries which you alone can answer are conjured up by the simple statement of "refraining from using the knife on sufferers from stone."

However, one must not go overboard. Merely because an illness is anatomically under the aegis of one specialty does not mean that *ipso facto* such specialists have the best treatment, or that therapeutic fashions will not change.

Here is an account of the changing fashions in the common backache.

"Backache has been known since ancient times. In 900 A.D. it was the essential difference between smallpox and measles. Then it was a prominent feature of intoxication from food poisoning. Next, bacterial and other infections like cold and influenza caused it. Later, it was due to neuritis and inflammation of the nerves. Also, it was due to a condition of the internal organs, even pregnancy."

(When I was an interne, a good deal of gynecological surgery was for the cure of backache. We called some of these operations pelvic uplifts).

"After x-ray was discovered it was due to posture or displacement of the bones. Although the joints of the spine are the most perfect joints in the body, and they permit all types of motion and yet keep their fixed position, all of a sudden backache was due to a disc slipping from a bone of the spine, although there was less likelihood of a disc slipping from the bones of the spine than a limpet slipping from a rock.". . . "We have seen fashions exhibited in appendicitis, colitis, dropped kidneys, etc., and now discs."†

Dr. Max Ballin often said: "We will wait two years." In that length of time a new procedure will have been tested and tried under circumstances where volume of cases and controlled observation are available. Similar wisdom goes back to Ambrose Paré (1510-1590): "A remedy thoroughly tested is better than one recently invented." Don't lose your clinical perspective!

Personal Conduct

The AMA Code continues:

"The physician must keep himself pure in character. He should be modest, sober, patient, prompt to do his whole duty without anxiety, conducting himself with propriety in his profession and in all the actions of his life. . . . A physician should neither exaggerate nor minimize the gravity of a patient's conditions. . . . Self laudations defy the traditions and lower the moral standard of the medical profession; they are infractions of good taste and therefore unethical. The promise of radical cures or boasting of cures or of extraordinary skill or success is unethical."

A very brilliant young physician who had been in practice in the city only a few months told his patient, "I will now proceed to give you an examination better than you can obtain at the Mayo Clinic." He may have been correct, but according to the AMA code of ethics, he was lauding himself and therefore unethical.

The AMA code comments on this same thought, as follows:

"The most worthy and effective advertisement possible, even for a young physician especially among his brother physicians is the establishment of a well merited reputation for professional ability and fidelity. This cannot be forced, but must be the outcome of character and conduct."

When I first came to Detroit, my job was to write up some of Dr. Ballin's clinical material into medical papers. One afternoon I handed him a brief article upon which I had spent many hours. Evidently in an off-mood, he took one look at it, continued going from one examining room to another, shoved it into his pocket with the comment, "This business is built on satisfied customers!"

Professional Confidence

To get back to old Mr. Hippocrates:

"And whatsoever I shall see or hear in the course of my profession as well as outside of my profession in my intercourse with men, if it be what should not be published abroad, I will never divulge, holding such things to be holy secrets."

†Brailsford, J. S.: The Spectator. London, England, Feb. 4, 1955.

The AMA code says the same thing in a bit more modern and not quite so picturesque language.

"Patience and delicacy should characterize all the acts of a physician. The confidences concerning individual or domestic life entrusted by a patient to the physician and the defects of disposition or flaws of character observed in patients during medical attendance should be held as a trust and should never be revealed unless imperatively required by the laws of the state."

The laws of the different states vary somewhat in interpretation of these privileged confidences. Usually an exception is made when a person is under sixteen or when a crime has been committed. Usually, by act of law, this regulation survives the patient and is applicable after death.

Shakespeare also had a word on the subject. After Hamlet, in the company of his two companions, had seen his father's ghost, he entreated them not to breathe a word or whisper any intimation of what they had heard or seen with the following language:

"Never make known what you have seen tonight. Come hither gentlemen and lay your hands again upon my sword. With arms encumbered thus, or this headshake, or by pronouncing some doubtful phrase, as, 'well, well, we know,' or 'we could if we would,' or 'if we list to speak' or 'there be, and if they might,' or such ambiguous giving out to note that you know aught of me: This not to do, so grace and mercy at your most need help you!"*

Note how carefully he tries to caution them against any slight gesture or mild intimation which could be exaggerated into rumor and fancy.

Some time ago, I had dinner with one of the residents and his wife. Within the space of fifteen minutes his wife told me the condition, history, outcome of every sick patient in the entire hospital. He had simply and unwittingly "sounded off to his wife" about all of his daily happenings. This is a very common failing, if you want to call it such. In the language of the oath and code, these are to a certain extent unethical.

The whole moral code can be summed up very briefly in the final words, first from Hippocrates and second from the AMA code of ethics:

"Now, if I carry out this oath and break it not, may I gain forever a reputation among all men for my life and for my art; but if I transgress it and forswear myself, may the opposite befall me." (Hippocrates)

"The life of the physician if he is capable, honest, decent, courteous, vigilant, and a follower of the golden rule will be in itself the best exemplification of ethical principles." (AMA Code)

In other words, put yourself in the patient's place and ask the simple question: What would you like to have done upon you?

Talking to Patients

When I first came to Detroit, a doctor whom I had just met said to me, "Well, if you're going to be associated with Dr. Max Ballin, observe what he tells the patient." I thought that was an odd remark, but as I followed it I realized that this ethical behavior was continually exemplified in his handling of those about him. He was strict and did not mind a sharp or sometimes angry retort, but everybody knew that there was a kindly spirit, an appreciation of the whole situation of illness, and an ability to put himself in another's position and share their worries, and withal there was a strict sense of honesty and honor.

As I stated, one must solve these problems according to the dictates of his own conscience. However, when it comes to telling the truth, modern medicine seems increasingly inclined to encourage it. Doctors are much more inclined today to take the patients into their confidence than they were a generation ago. The reasons are several. Patients are much better informed today and if one does try to fool them and the condition is serious, they will seek other advice immediately, or look it up in a book, or the next weekly magazine they read might have the answer for them, and in unequivocable terms. For another reason the truth is the most practicable. If three or four doctors are in attendance, and a line of conversation and an explanation is agreed upon that is not exactly consonant with the facts, one or two are apt to forget what they have told the patient, or somebody else will unwittingly tell the true facts or some friend will reveal them. Then the patient comes back with a legitimate feeling of doubt as to the veracity of his or her medical advisors. One time a few years ago, walking around at a neighboring university clinic, I asked the professor whether he always told a patient he had cancer. He said yes. Then he related that several years ago they had taken care of a man for carcinoma of the larynx. His wife begged them not to tell the patient his true illness; they followed her pleadings. About five years later,

*Hamlet to Horatio and Marcellus, Act I, Scene V.

she herself came back to the hospital and was found to have cancer of the esophagus. They told her the nature of the true illness, whereupon she stated that she certainly wouldn't believe a word they told her because they had lied to her husband five years before.

One can summarize this again from Shakespeare:

"To thine own self be true, and it must follow as the night the day, though cans't not then be false to any man."†

Personal relationships are something that grow out of character and cannot be detailed or learned in books. There is a story about Dr. Balfour, inventor of Balfour retractor. He was finishing his fellowship service at the Mayo Clinic and wondering where he was going to go to practice. Will Mayo came to him and said, "I have noticed that when patients leave Rochester they come here and shake you by the hand to thank you. You stay here with us."

A few weeks ago one of the residents called me up and said, "Guess what! Mrs. so and so brought me a bottle of champagne." I was not surprised because two weeks before the patient in question had lain in bed for three or four days while a specimen of a small breast lump had been sent to New York for a consultant opinion. When I called up this resident and told him to tell the patient that she could go home, that she did not have to have her breast taken off, he exclaimed, "Gee, that's swell, I'm sure she will be tickled and happy. I'll run upstairs and tell her immediately." He had shared her problem and had worried along with her.

Choosing a Physician

How do patients choose a physician? What makes up the different facets of a physician's character and ability which makes the family want to employ him? There are various reasons, but as young men, you may be surprised to find out how irrational people are, and how one little slip or gesture or smile or, on the contrary, some little mildly repulsive act will sway a patient's regard for you.

Lord Thomas Horder, the eminent English physician, was once called to a consultation, and he puzzled for a while as to why they had picked out their particular family advisor. On inquiry, the answer was, "Because he played the piano nicely." Now that might be a silly and pointless remark, but it might also denote that the particular doctor had poise, charm, got down to the patient's level of interest and was a sympathetic companion, and this may have hidden a host of deficiencies in his medical education.

Comments have been made in the hospital that patients object to an untidy appearance of the interne. Perhaps your contemporaries did not shave, and their neckties are not adjusted. These are minor matters, but you have no idea how important they might seem to somebody who is lying flat on his back and looking straight up at the ceiling all the day long.

Years ago a rather eccentric person was bitten by her favorite pet dog at midnight. She was making fudge and some of it dropped on the dog's neck. She went to Herman Kiefer Hospital and they had no emergency service, so she went to Harper Hospital. She was treated satisfactorily by the resident at 2 a.m. By this time she was quite distraught. The next day, all she remembered of the occurrence was the horrible looking blue shirt the resident wore and how it clashed with his white uniform. She immediately wrote a letter to the superintendent complaining about that blue shirt; not a word about the efficient care at 2:00 a.m.

Moral Overtones

I would like to touch briefly on one facet of this ethical problem. Daily in your work as intern or resident and throughout private practice, you will be faced by moral choices of one degree or another. These are never presented as sharp-cut black-and-white figures but there are always shades and overtones of gray. How do you solve them? It depends on your own moral fiber. Your conscience may be elastic and settle for anything. On the other hand, you might have a puritanical inner voice which defeats your own usefulness by being absolutely stubborn and inflexible.

The simplest example I can think of is this: I have never seen a hernia in a man who had insurance against it where he would admit that the rupture antedated his taking out the insurance. In one recent instance, I had a note on my chart stating that I examined a patient in 1951 and he had the hernia then, but his answer was, as it has always been in other cases, "Well, I've paid on that policy so long that I'm cer-

†Hamlet, Act I, Scene 3.

tainly entitled to benefits. The total hospital illness would mean $300 to $500 to me and I cannot afford that." You are faced with the moral choice of either accommodating him or holding fast to what is stated in your record and the possibility of being subpoenaed for the record, or for what he might have stated in the hospital.

Another example: The child has a temperature of 103° and persistent local tenderness over the appendix region. The operation was done after some observation, and the appendix proved to be very slightly if at all inflamed. Should one tell the family that there was nothing wrong with the appendix? Or that there was mild appendicitis but there are other things wrong which we will have to observe? Or that the appendix was diseased and that was the child's entire sickness? You can easily do the last because nowadays with the powerful antibiotics and general care that we have, one can feel morally certain that in a few days the temperature will abate and the child will be well.

From these simple illustrations, one can progress into all sorts of complicated family or personal relationships, or soar into the heights of politics, drama or fiction. You can paint the various shades of grey to your own satisfaction.

The Caine Mutiny is an arresting drama depicting the conflict between blind loyalty to a superior naval officer, no matter what his competence, and the instinct for self-preservation in the center of a typhoon.

To one politician, a national campaign is a "forum where one's personal sense of honor and responsibility should be supreme." To another, it may be a job wherein he can "peddle any shoddy promise or half truth," "endorse any foul tactic" or "abandon any friendship"—all for the sake of votes.

Religion, Psychiatry, and Medicine

As everyone knows, in the Middle Ages religion and medicine were synonymous. The only medicine was that practiced by the priests. When our base hospital went to France in the First World War, we were quartered in a small monastery in the south of France, a bit inland from Bordeaux. In the basement of the monastery there was a dispensary full of herb medicines, which the monks dispensed to the populace as late as 1917.

There were very few psychiatrists in the First World War. The growth of psychiatry has come about since then. Next we have seen the increasing emphasis on psychosomatic medicine, which is past the experimental and joke stage. We are now witnessing a tremendous renaissance of religion in this country, described and documented in a recent feature article in *Life Magazine* (April 11, 1955). Church building is a boom industry. There are thousands of "store front church congregations," many of which are questionable in intent but others representing a sincere desire in people of all classes to partake of some spiritual or ethical or religious guidance which they feel has been lacking. Not to be outdone, *Newsweek* (Oct. 24, 1955) had a seven-page article on "The Mind," tracing the history, present status and problems of psychiatry. Ten million people in this country need a psychiatrist's care, and there are only 4,000 psychiatrists.

The modern doctor must be attuned to all this. Again one can go back to ancient times. The following is an epitaph on the tomb of an Athenian doctor who lived in the second century A.D. "These are the duties of a physician: First to heal his mind and give help to himself before giving it to anyone else and not look upon his patient or make approaches contrary to divine law and to the oath." The Catholic religion has quoted Jesus over and over again as saying; "Physician heal thyself." An old Hebrew proverb has it, "Heal thine own lameness." Psychiatrists demand that any practitioner must have this insight into his own emotional life. There is no question but that the awareness of religion or religious principles or psychiatric principles is increasing in the practice of medicine today.

Such concepts are more important from a practical standpoint in some specialties than in others. A general practictioner in an impoverished community or neighborhood must perforce become a practicitioner of the healing art, which embodies the principles of psychosomatic medicine, if he merely gets up each day and goes his rounds and then goes to bed and continues in this fashion year in and year out. In order to dispense his type of therapy, or guidance (and often solace), he must apply these psychodynamic principles himself. The pediatrist knows the mothers' reactions. The gynecologist, by and large, has made a conscious effort to learn these modern trends of thought. In other specialties the need may not be so apparent. The roentgenologist can sit in a dimly lighted room in front of a view box all day and need not be

concerned with such nonsense. The busy operating surgeon is apt to neglect them. The prosperous allergist, whirling about between his needles and his patients, has no time for them.

As an example of this void in medical care, Norman Vincent Peale's Church in New York operates a psychiatric clinic which sees 1,500 patients a year. The staff comprises several psychiatrists, social works, psychologists and clerics. Although perhaps the medical opinion might say that this is a rather superficial approach, nevertheless the demonstrated success of the venture only confirms the need for such services.

Consider these psychiatric concepts seriously in your hospital work, and take every opportunity to learn them!

The Internship

At the hospital stage of a doctor's education, it is high time that he formulated proper attitudes and habits of work. I hope you will pardon a few bits of advice.

1. A good history is not one that is three pages long, nor is it one that is a quarter of a page long. It should detail accurately and chronologically the exact story of what the illness actually is. Will Mayo once remarked, "I know of no more delicate adjustment in the whole realm of human endeavor than that of trying to winnow the wheat from the chaff in taking the history of a nervous person's illness who does not observe carefully and cannot remember exactly." My own personal feeling is that if one learns how to take a good clinical history in the year of internship, the year will have been successful. It transcends all of the laboratory and consultative opinions you can get.

2. Put down as exactly as you can, what you have observed. If there is a lump in the breast or a mass in the abdomen, write down as many characteristics of that mass as you can find. Is the skin dimpled? Are there nodules palpable? Is it tender? et cetera. Examine it two days later and see if you can add anything.

3. Learn to know your patients as a whole individual, not "that hip in 301," or "that cardiac failure in 513." You may have something on the orthopedic consultant, for example, if you know more about the entire disease picture than he does.

4. Get acquainted with your patients in your spare time. It is rewarding. You will find that conversation oriented to their own ills and worries is more educational than your own recital of your new baby, new wife, or new automobile.

5. Learn as much pathology as you can. In spite of the growth of ancillary sciences such as bacteriology, physiology, chemistry, and so forth, pathology still remains the backbone of diagnostic accuracy. Just try this experiment for yourself in the next six appendices you see. Mark down what you think is the pathologic condition of that appendix as determined by your history taking and clinical examination. Is it simply red and injected? Is it covered with exudate? Is it gangrenous? Is there peritoneal soiling, and if so, how much? Thus try to get in the habit of visualizing what the picture of the disease inside the abdomen is before you see it opened up before you. Likewise, write down exactly what you expect to find in the postmortem before the event.

6. Read up on the topics of your day. If you have seen an unusual heart case that day, or peculiar fever, or a bizarre ulcer, take ten or fifteen minutes at night to review the standard information on that subject. If you have assisted in a gall-bladder operation, take down the book on anatomy of the gall bladder and see why or how the technical pitfalls were avoided. Use the standard texts, not necessarily erudite scientific articles.

7. Whatever you do and wherever you go consider your own education. The commonest fault that I find is for an interne to come up onto the floor and ask the nurse what intravenouses are to be given, squirt the needle into the vein and disappear in five minutes. The nurse has carried out her responsibility, the interne has done what the hospital pays him for, but the total transference of knowledge is nil. Why did the patient need that particular intravenous injection? Did you agree with what the attending physician or surgeon ordered? Should he have done this or would you have done differently? What is the progress of the patient in the last day or two and what can one expect? Are the fluid balance and electrolyte problems adequately handled? All these demonstrations are here for your asking. A nurse called an interne saying that a patient was dying and would he come up and see her. The answer she got on the phone was, "Well, let me know when he dies and I will come up and sign the death certificate." What a wealth of educational opportunity that boy missed! Here was a

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Pulpstones and Head Pains

By William A. Cook, D.D.S.
Midland, Michigan

THE pulpstone is a bone-like concretion in the substance of the dental pulp. Without a doubt, pulpstones have been the etiologic agent of head pains in considerable numbers and with wide variation in pattern and intensity. As a cause of referred pain, the pulpstone has not been commonly recognized. Practitioners of long experience have stated that they have never heard of pulpstones being the cause of referred pain and some have never heard of pulpstones. However, failure of recognition may be the reason for not having had experience with them.

My personal conviction in this problem is based on a considerable number of cases in my own practice, plus the experiences of some of my acquaintances.

There is agreement among my confreres, in both the dental and medical professions, that pulpstones have caused serious trouble and in sufficient numbers that the possibility should not be disregarded when head pains of obscure origin are under study.

Pulpstones have been responsible for diverse manifestations of pain. Some have presented the symptoms of migraine. Others have been manifested in stabbing paroxysmal seizures, both intracranially and extracranially. Others have been expressed as "sick headaches" with dizziness and nausea. Others have simulated the lightning flashes of tic douloureux. Some cases present all of these manifestations.

It is well known that cases of severe pain of pulpstone origin have been diagnosed "atypical" (whatever that means), and one of our cases was declared to be on a psychoneurotic basis and so treated with a series of eight shock treatments.

The literature on the subject is scanty. The American Dental Association library has about a half dozen articles which deal directly with pulpstones as the cause of head pains. The American Medical Association librarian wrote, "We regret to report that we have not found any articles dealing strictly with dental pulpstones as a causative agent of head pains. However, we are enclosing a few references which cover the relation between headaches and dental infection."

Researchers in dental anatomy, who have observed the development of pulpstones, are not in accord regarding their cause. Age is not the answer. Pain due to pulpstones has been reported in an eight-year-old child, and pulpstones are common in adults of all ages. The health of the teeth is not the answer. Pulpstones in teeth without caries and with healthy supporting structures are as common as in teeth with extensive caries and periodontal disease.

Pulpstones are concretions of calcium phosphate, calcium carbonate and magnesium phosphate. They develop within the dental pulp, which is a soft tissue mass composed of nerve fibers, fibrous tissue, blood vessels and lymph channels, and which fills the pulpal chamber.

It is obvious that pulpstones begin with a granular deposit and grow by increased deposits similar to other calcareous bodies, such as gall stones, gouty concretions, renal calculi, et cetera.

It is obvious, too, that like other concretions, pulpstones can and do create irritations with accompanying inflammation and pain, and especially if the concretion is in nerve substance with which the dental pulp is well supplied. Many pulpstones grow to completely fill the pulpal chamber, and in those instances the blood supply may become strangulated, with resultant death and necrosis of the pulpal tissues, inflammation and pain.

All pulpstones do not cause trouble. In fact, proportionately, it is a rare occurrence. Many people have multiple pulpstones and some have them in all of their teeth. I had two patients, who were sisters, and all of their teeth were filled with pulpstones, yet neither had ever had local pain or headaches of obscure origin.

To make a diagnosis of pulpstones as the cause of referred pain is oftentimes most difficult and sometimes impossible; likewise, it is frequently difficult or impossible to isolate the offending tooth.

Stafne sums up the problem as follows: "Pain is one of the most frequent symptoms of complications associated with pulp nodules. The pain may vary from a mild neuralgic type, which

the patient may tolerate for many years without undue complaint, to an excruciating type analogous to tic douloureux. Garreston reported that removal of pulp nodules afforded complete relief of dental neuralgia which has been present during the greater part of the life of a patient sixty years of age. Such pain is not confined to adult patients. White reported two cases, in one of which pulp nodules in a lower deciduous cuspid were responsible for pain. The patient was a boy eight years of age.

Neuralgia caused by pulp nodules often presents a difficult problem in determining the focal spot. In no event should a hasty diagnosis be made, as too often in such cases one or more teeth are needlessly sacrificed. This is significant, in view of the fact that pulp nodules, if present, are usually found in the pulps of several teeth. Pulp stones are far too common to lead to the conclusion that they are the one causative factor of neuralgia. A thorough investigation should be made to discover and, if possible, to eliminate other conditions in and about the mouth which might be responsible for referred pain, such as other defects in teeth, abnormalities of the sinuses, infections of the ear. Posterior maxillary teeth, especially those with pulp nodules are in danger of being extracted unnecessarily if these conditions are present and not recognized. In any case of neuralgia, the source should be eliminated whether it is a pulp type nodule or some other focus, for a mild type of neuralgia may develop into a severe type, which may persist in spite of removal of the original focus."

Since there is little material on which to present a comprehensive discussion of this subject, three case reports are submitted for consideration. The cases were selected because each has been a patient of a member of the Michigan State Medical Society and was referred by the physician-in-charge.

Case Reports

Case 1.—Mrs. P., aged sixty-nine, the wife of a physician in Detroit, had suffered intracranial pain over a period of "several years," and migraine was thought to be the cause. Frequent attacks confined her to her bed. During a European trip with her husband, she was stricken with an attack in Paris which kept her in bed for ten days. When she was sufficiently recovered to travel, they came home and she went into Harper Hospital for examination. The several diagnostic departments found nothing to which her trouble could be ascribed.

Two of Dr. P.'s friends continued to consult with him about the case and one of them requested a dental examination. Roentgenographic examination revealed pulpstones in her molar teeth and one appeared to fill the pulpal chamber of the lower left first molar. Percussion elicited a "different feeling" in the lower first molar than in the adjoining teeth. An electric pulp-tester induced only a slight response. Hot water on the lower left first molar brought on the same severe intracranial pain, with which she had long suffered. Inferior alveolar nerve block anesthesia stopped the pain. The tooth was extracted and during the remainder of her life (three years) she had no recurrence of the pain.

Case 2.—The following statement was brought to my office on October 15, 1955:

"The first part of June, 1953, my head started aching severely on the right side. My right eye felt as if it was pulling to the side and my right ear felt as if there was a terrific pressure on the inner ear. We called Dr. — and he came to the house and examined me. He thought there was something wrong with the fifth nerve, but called Dr. — to make sure there wasn't something wrong with my eye. He assured us there was nothing wrong with the eye. Dr. — then advised me to see Dr. —, a neurosurgeon in Saginaw. I went to see him and he advised an operation in which he said he removed a section of the fifth nerve and tied off a small blood vessel. This operation did not help at all as the pain was as bad as ever. At this time my head ached almost constantly.

"Dr. —— then advised me to see Dr. ——, a psychiatrist in Flint. He thought some electric shock treatments would help and I had a series of eight shock treatments, which did no good at all; they only discouraged me. At about this time I made up my mind that no one would help me. I then went to see Dr. —, a chiropractor, who told me a bone in my neck was out of place. After a few treatments, I could see he would never help me, but only wanted me to keep coming back. I then went to see Dr. — who examined my eyes, ears, and sinuses and found everything fine. Dr. — advised me to see Dr. — who first treated me for allergies. This didn't help at all, and he then sent me to Midland Hospital where I had a spinal tap and pressure test which showed everything to be all right. Dr. — then tried to help me with all kinds of different medicines. I would try one for a week or two and then another. Then he took me to see Dr. — who x-rayed my teeth. He found that I had pulp stones in three teeth. One tooth had quite a few stones in it. Dr. — tried several different things to see if he could determine which tooth was really causing the headache. I got discouraged and went back to Dr. — who made arrangements for me to go to University Hospital in Ann Arbor where after staying five days they didn't find anything wrong except that I was rather nervous. Let me say at this time I was completely discouraged and didn't know what to do. My husband wanted me to have this tooth pulled and I really didn't care any more what anyone did. He took me to Dr. — and asked him to pull the tooth which, after a lot of persuasion, he did. That was in January, 1955. My head has ached only once since the tooth was pulled and I feel wonderful, like a new person."—*Mrs. A. J. W.*

Case 3.—Mrs. W. B., a housewife, age 31, who complained of a pain on the right side of her head, made the following statement on June 15, 1955:

The patient's statement was as follows:

"Four and a half years ago a sharp pain in the right side of my head hit suddenly and with great severity. Since then I have had frequent attacks and so severe that I would become dizzy. There has been no constant pattern, they would just come and go.

"I was working for a physician in Mt. Pleasant and many times I had temporary relief from different medications, but always my headaches would recur. I had many examinations, general physicals, EKG, EEG, spinal tap, complete neurological, and eyes. Several times I was in the hospital for diagnosis and treatment, to no avail. The pain usually came on when I would get up in the morning.

"In Grand Rapids I was examined by a neurosurgeon for brain tumors and he found nothing wrong. He referred me to a psychiatrist but my home physician said that he had known the case since its beginning and it was not on a psychiatric basis."

On June 15, 1955, she had a severe headache on the right side. X-rays revealed pulpstones in the upper molar teeth, and the right posterior superior alveolar nerve block relieved the pain. On June 24 she stated on the telephone, "I have been comfortable since the June 15th attack." On July 7, 1955, she suffered a severe right frontal headache, the first since the June 15 attack. Posterior superior alveolar nerve block relieved the pain and the headache stopped. Again on July 21, 1955, there was a severe right side head pain. Infiltration anesthesia over upper right first molar relieved the pain. The upper right first molar was extracted. On August 11, 1955, in a telephone conversation, she said "Not a sign of pain. This is the longest that I have gone without pain that I can remember." Again on September 2, her husband said, "She is comfortable. We're keeping our fingers crossed. It's wonderful so far." On November 4, she commented, "I feel wonderful. I have had no pain at all. It just doesn't seem possible."

It seems apropos at this time to state that we have seen seven positive pulpstone cases in the last two years. The pains have varied from toothache to excruciating intracranial pains.

All of these patients have had complete relief after the removal of the offending tooth. Also we have seen three other cases with obscure head pain, with pulp stones present, but we have been unable to determine the cause.

MEDICAL ETHICS

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disease picture in its terminal stage, with opportunity for observation of variegated conditions, and the young hopeful was too lazy to look!

8. You will find staff men, by and large, very open to critical suggestion and they will welcome any inquiry you might make of them. The one thing that they ask, however, is that you know their patients. If you have studied and followed the patient with them and know what has been ordered, you can partake of their experience, which antedates yours by ten to twenty years. You will find they are interested in you, if you are interested in them.

In the operating room, know your patients from your own examination the night before, if at all possible. If an interne comes into an operating room at 8:00 a.m. and asks me what is the history of this case, personally I "clam up." If, likewise, the resident snatches a chart from underneath the stretcher about three minutes before eight o'clock and looks it over, then comes into the operating room, I am not very much inclined to let him do the operation. Because in the first place, that is not good instruction, and in the second place, I don't think he has earned the right.

We all recognize that the interne year is changing. Nobody considers that you are a hired employee of the hospital, although there is an implied obligation behind your contract. We all consider that the interne year is the fifth year in medical school, and that you are here to learn principles of the practice of medicine as well as clinical facts.

The Present Status of Muscular Dystrophy

By Charles J. Pelletier, M.D.
Hazel Park, Michigan

THROUGH the activities of a lay organization, incorporated as the Muscular Dystrophy Associations of America, the disease muscular dystrophy has become increasingly familiar to people throughout the country. The author feels that this familiarity by the public validates a general review of the condition in order that doctors, first, may more readily recognize cases that could be overlooked and, second, be able to answer those pertinent questions that patients are sure to pose.

Historically, muscular dystrophy was first established as a disease entity in the second half of the 1800's, although the first accounts of the disease were those of Semmla in 1834 and of Costa and Gioja in 1836.

In 1868, G. B. Duchene of Boulogne described the pseudo-hypertrophic form of the disease which bears his name. This form is by far the most prevalent. It is hereditary in 35 per cent of all cases and affects three times as many males as females. It commences in childhood between the ages of three and ten and runs its course more rapidly than any of the other types. The prominent feature is an increase in the size of the muscles affected, particularly those of the calf. The calves become abnormally large and give the appearance of tremendous strength, and yet they are particularly weak. The hypertrophy is due to fat deposits, resembling localized lipomata and little or no trace of muscle fibers. As the condition progresses, the muscle bodies become shortened and contractures develop. These contractures lead to distortions of the limbs. Those in the calf muscles make it difficult or impossible for the patient to get his heels to the ground, and so he is forced to "walk on his toes." Later, as the contractures involve the hamstrings, the knees become flexed and the patient is unable to walk or stand.

Prior to the formation of contractures, the weakness of the muscles of the legs and about the hips makes it difficult for the patient to arise from a chair. In ascending stairs, the patient rises a step at a time by pushing his trunk erect from the flexed leg with his hand and arm and thus follow up with the other leg. In arising from a lying position, the patient must roll over to a prone position, face downward, and raise his trunk on arms and knees and then "climb up" himself by means of his hands placed at increasingly high points on his legs. The patient also develops a peculiar rolling or waddling gait, aided by a side to side motion of the trunk and shoulders. This is to accomplish the act of raising the foot from the floor, rather than to try to lift the foot directly by action of the quadriceps femoris group.

It is this group of patients that fall and stumble frequently. This is the child who is brought to the doctor with the complaint "he stumbles and falls over nothing."

Prior to the use of chemotherapeutic agents and the antibiotics, it was taught that these patients rarely lived beyond their teens, usually succumbing to a lung infection, the weakened muscles of the thorax being unable to expel the secretions of the lungs. As a result, these patients frequently strangled on small amounts of mucus in the bronchii and trachea. Liberal use of antibiotics and oxygen, preferably by nasal catheter, is indicated early in all pneumonic and upper respiratory infections. Laryngeal suction apparatus should be available and tracheotomy may be necessary.

In 1884, W. H. Erb described a second form now known as the juvenile form of the disease. This form has its onset in childhood or adolescence. The muscles earliest affected are those of the shoulder girdle, thigh and back. The progression, while similar to that of the pseudohypertrophic type, is slower so that these patients may attain middle age. This form likewise shows a strong hereditary tendency, but females are as equally affected as males.

In 1886, the fascioscapulo-humeral type was distinguished from the juvenile type in a paper by L. Landouzey and J. Déjèrine. This is quite similar to the juvenile type and some authorities class it as part of the type described by Erb. This form develops in early adulthood and the muscles first involved are those of the face followed by the shoulder girdle and upper arms. The atrophy of the facial muscles produces a characteristic tapir

mouth. The lower lip curves downward so that the smile is transverse. Early the patient has considerable difficulty in whistling or drinking through a straw and later these abilities are lost entirely.

Finally, there are those forms of the disease which are classified as mixed types. These are more difficult to categorize. Included here is the fatal progressive myositis which has its onset between the ages of thirty and fifty. It shows no inheritance tendencies and may strike anyone. It is closely related to the pseudohypertrophic form and, as in the latter, the course of the disease is very rapid, often causing death in from five to ten years.

The underlying cause of the disease remains a mystery to investigators. Basically, muscular dystrophy has been considered to be a muscular disorder for this is where some pathology is demonstrable. However, investigations must be directed at the entire organism. Where would we be in the treatment of pernicious anemia if all research had been directed at the bone marrow or the red blood cell?

We must recognize that, as a disease showing hereditary tendencies and appearing at variable stages of life, there must be genetic defect and, with it, some metabolic error. This thought is not too difficult to conceive when we consider that such a process occurs in diabetes mellitus.

It has been established for a number of years that there is a definite relationship between Vitamin E deficiency in the diet of certain laboratory animals and the occurrence of muscle weakness and paralysis (both in the animals and their progeny), associated with histopathologic lesions of skeletal muscles. The term "nutritional muscular dystrophy" is used for this disorder, because of certain resemblances between the lesions observed in the muscles of these animals and those characteristically found in biopsies of muscles of muscular dystrophy patients. These experiments led to an early wave of enthusiasm in the use of Vitamin E for dystrophies. The similarity of the conditions stopped here, for, where it was possible to cure the dystrophic animal with adequate dosages of Vitamin E, no amount of the vitamin or variations of its chemical structure have demonstrated any lasting effect in the dystrophic child. Karl Mason showed that the disease is not due to an absence of Vitamin E in the affected muscle but rather that there is an overabundance. This favors the assumption that some inherited metabolic error causes little or no production of an unknown catalytic agent capable of changing the Vitamin E molecule so that it can be utilized by the muscle cell.

Clinical diagnosis of muscular dystrophy should present no problem. In the child, the hypertrophy of the calf muscles is much out of proportion to the muscle development of the rest of the body. This is particularly true in reference to the arms, as by the time the child is presented for diagnosis there may be some hypertrophy of the thigh muscles. It is felt by the writer that in children who do not walk by eighteen months, in the absence of some brain disorder or other evident pathologic condition, progressive muscular dystrophy must be considered and ruled out.

Laboratory diagnosis is inadequate. There is an increase in urinary excretion of creatinine together with a low level creatine output. This finding has been for years the only criterion for the diagnosis of muscular dystrophy.

Recently George Schapira and his group, working at the University of Paris, reported an increase of blood enzyme, serum aldolase occuring in muscular dystrophy and not found in other neuromuscular diseases. This work bears promise of not only a laboratory diagnostic aid but also a treatment guide for various chemotherapeutic agents, to be used in the investigation on muscular dystrophy. It must be borne in mind that this work is new and needs verification.

Muscle biopsy and microscopic diagnosis are a definite method of diagnosis. In the early stages the muscle fibers may be swollen, with loss of striations and increase of the sarcolemma nuclei, but later the fibers become atrophic. In this stage there may be a marked increase of the interstitial tissue, and great deposits of fat may occur between the muscle fibers. It is to these deposits of fat that most of the enlargement (pseudohypertrophy) is due.

In a recent review of the literature in addition to his own work, A. T. Milhorat listed eighty-two substances and procedures in various combinations which have been tried in the treatment of the condition. None of these substances or procedures has shown any significant lasting effect on the course of the disease. Some are reported to be of slight therapeutic value, or are found, in an occasional patient, to produce mild beneficial effect.

Despite the blank wall of definite medical man-

agement, there is much that can be offered these patients. Primarily, they should be given hope. They should be maintained in as good health as possible through adequate diet and supportive vitamin therapy, and each infection must be treated as energetically as possible with all present antibiotic aids. Any period of bed rest or inactivity should be avoided. If the patient is forced to bed for any period, however brief, motion and exercise in bed must be prescribed.

It is in the field of physical medicine that much can be offered these patients, not only children but adults as well. At the time of initial diagnosis, a base line of maximal physical capacity should be established. All muscle groups should be tested and recorded. This base line should be reevaluated within a month to six weeks to correct any errors present, due to incorrect diagnosis or poor cooperation on the part of the patient at the time of the initial examination.

At the time of the initial testing, the parent, or the patient himself in the case of adults, should be shown which muscles are weakened or where contractures, if any, are beginning to develop. The parent should be instructed, first, in passive stretching to overcome the contractures and, second, in strengthening exercises, not only of the weakened muscles, but also of those muscles which later may become affected. This program must be carried out daily and periodic check ups must be made by the orthopedist or physiatrist.

This program of physical therapy serves a twofold purpose. It is of definite benefit to the patient and, properly conducted and followed, it should delay by several years the day when the patient is confined to a wheel chair. Secondly, it gives the parent a sense of "doing something" for the child and gives release to the feeling of helplessness that the parent of a dystrophic child feels. This release from the feeling of despair will often prevent the parent from rushing from clinic to clinic to quack, to charletan and to all the other therapeutic vultures who are preying on the fringes of medicine, and it will be an immeasurable gift to those parents who might otherwise be told by their family doctors, "Sorry, nothing can be done for your child."

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The AMA Film Library recently acquired two nontechnical films that explain the functions of the heart and endocrine glands. Both films are so simply and effectively illustrated that they may be understood by any lay audience. Designed primarily for college hygiene and health education classes, these films are excellent teaching devices for any public group a medical society might wish to reach. Bookings may be arranged through the Film Library.

(1) "Common Heart Disorders and Their Causes"—functions of a healthy and disordered heart are demonstrated in this seventeen-minute film. One of the unique aspects is that it stresses the fact that people with heart disease are able to live long lives without seriously limiting their activities. (2) "Endocrine Glands—How They Affect You"—this film locates and describes the eight endocrine glands and explains the function of the hormones these glands secrete. The fifteen-minute film studies the effects of these hormones on growth, metabolism, sexual development and behavior, and shows what happens when the flow of certain hormones is increased or decreased.

Editorial

RED FEATHER

The autumn season of the year is upon us, and for the past many years we have seen the "Red Feather" campaigns. During the first World War there were "drives" to raise money for every worthy project, and each group with sufficient appeal gathered its workers and devoted a week or more to general canvassing of the business places and residences. Soon after the war, the various relief agencies and youth organizations continued the program proven so successful during the war. In the early nineteen twenties there were so many "drives" it was becoming a nuisance. A few cities attempted to consolidate the various campaigns into one each year to conserve the energies of the well-disposed community leaders who were invariably called on to help, a task which meant spending many days away from their business trying to raise money. "Welfare Funds," later "Community Funds," and then "Community Chests" were the result in most metropolitan areas throughout the United States. It was found people gave much more willingly and more generously for a group of projects.

Each city developed its own program, consolidating the welfare and relief groups which predominated, then added the youth groups, YWCA, YMCA, Boy Scouts, Campfire, Girl Scouts, Salvation Army, Visiting Nurses, Hospitals, St. Vincent de Paul, Jewish Relief, Charitable Union, Red Cross—fifteen to twenty groups united in one all-inclusive drive. This program was an almost instant success and favorable periods of the year were selected in each community.

When the program had been accepted the term "Red Feather" was adopted and is being used quite generally. The season is now here and such campaigns are being conducted in most of our cities. There are thirty Community Chests in Michigan. The campaign in Detroit last year raised $15.5 million, a fabulous amount never before accomplished.

During the past ten or fifteen years a new group of organizations has sprung up, the medical disease group. We already had cancer, tuberculosis, and crippled children drives, but along came infantile paralysis, Sister Kenny, cerebral palsy, heart disease, muscular dystrophy, et cetera. All were conducting their own campaign and the same utter confusion again developed. Again an attempt was made to consolidate and with some success. Most of our Community Chests have accepted as one of their units the "United Fund."

Three medical groups have always remained aloof from the group because of their special appeal and method of money raising: the Easter and Christmas seals and the March of Dimes. Some of the other groups at first were glad to co-operate in the combined drives, but their national offices claimed they had more appeal than the others with whom they were associated and ordered their local branches to withdraw from the Chests. We are now again developing too many "drive" groups. Industry in some of our cities has in self defense limited the soliciting time to one organization. Any who do not co-operate in

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THE FRONT COVER

(Reading from left to right)

ARETAEUS, who lived in Cappadocia in the second century, is said to have written the first description of diabetes in which this name was used for the disease.

PAUL LANGERHANS, while working in Virchow's laboratory, began his study of the anatomy of the pancreas in 1867 and in 1869 described the islets of the pancreas which bear his name. His untimely death at forty-one ended the career of a young man whose name has become known to students of diabetes everywhere.

ADOLF KUSSMAUL 1822-1902, served as professor of medicine at Heidelberg, Erlanger, Frieburg, and Strassburg. His name is best known for his description of the dyspnea of diabetic coma.

OSCAR MINKOWSKI, born in Russia in 1858, did the first total pancreatectomy on a dog which marked the beginning of experimentation which was to lead ultimately to the discovery of insulin.

SIR FREDERICK G. BANTING, an orthopedic surgeon, obtained permission to work in Professor MacLeod's laboratory at the University of Toronto, after his discharge from the Canadian Army in World War I. With the help of Dr. C. H. Best, he was successful in isolating insulin from pancreatic material in September, 1921. This achievement, without doubt, is the most important milestone in the conquest of diabetes.

Rx: Humbleness and Service

As the year begins for me to assume the responsibilities of president of your state society, I pledge to you that I shall endeavor to carry out my duties with honor. I cannot do all that must be done alone. I hope I will have your good help and friendship.

We have numerous problems to solve. We must face up to them and re-evaluate our position in our communities and in our country. With more tolerance, a willingness to give more of our selves, and a better understanding of others' opinions of us, we can cope with any difficult situation that may arise.

I sincerely believe that the day when our profession was considered unimpeachable has passed. Breeding grounds of resentment and criticism have developed. It isn't pleasant to conclude this, but I believe we must recognize it and seek to remove the cause.

If we are not vigilant, if we become careless of our responsibilities, and if we are not willing to make an honest assessment of ourselves, we can lose our priceless heritage. It then will affect our freedom, welfare, and the dignity of our profession.

The principle of voluntarism must be maintained by us at all levels. This is our way in America. It is a priceless heritage to be nurtured and protected. It is our voluntary way of practicing medicine that has given our country something to be proud of.

But along with this pride we need a large dose of humility. Being more humble does not mean we lack self respect, pride or ambition. We must make an honest assessment of ourselves by being more anxious to listen than to talk, less anxious to criticize. Ours is a fine profession. If we will accept our problems and responsibilities all things will fall into their proper perspective.

Rich Walls M-D

President, Michigan State Medical Society

President's



Message

that way may have to develop new techniques.

Whatever the accepted way in each city, let every doctor of medicine accept the condition, and not only work for the associated community function but give liberally. Remember, many groups are included, and friends who call are actively at work to conserve your time as well as theirs.

Welcome, Red Feather. It reduces each charity or welfare interview to one contact rather than a dozen.

GERONTOLOGY

The percentage of the aging population is on the rapid increase. From 1940 to 1950, the average population in New York increased 35 per cent, but the population over age sixty-five increased 95.3 per cent. The gradual improvement in health and living conditions is responsible; the medical profession proudly takes part of the credit.

Time-honored economic practices decreed that older people continue to work as and if they could. Most of them were proudly self-sufficient, retiring when they wished if they had an established competence. But times have changed. The purchasing power of money has sadly diminished until the competence of twenty years ago is no more. The laboriously established retirement income is sadly inadequate.

Adding to the confusion is compulsory retirement at age sixty-five, adopted during the depression to make jobs for younger people. Worthwhile jobs were coveted by those in labor leadership. The aging person has difficulty obtaining work, especially in competition with established pension privileges.

The Bureau of Census in 1950 studying 5,600,000 persons in non-farm households throughout the nation, over sixty-five years of age, found that 46 per cent have incomes of less than $1,000 a year and 77 per cent were under $3,000.

Lack of jobs, low incomes, poor housing, physical and mental inadequacies for education or recreation have all contributed to the unhappy state of our rapidly increasing millions of elderly frustrated people. A conference on the problems of the older people was held in Ann Arbor in July.

What can be done? The State of New York has taken official legislative action, and funds have been granted to help older people obtain jobs on the theory that employment should not be denied on account of age to willing workers who are able to work. Older laborers have more experience, skill and stability when working. The employed also diminish the relief rolls, as well as pay additional taxes.

The New York State Employment Service has demonstrated that older workers are valuable assets, worth having and worth keeping. A Bureau of Chronic Diseases is actively experimenting on reducing hospitalization costs, allowing older people to live at home, sending food, et cetera, to them on wheels. They are attempting to reduce the number of full-time hospital patients. A law also provides state aid for services to the aged, including preretirement counseling, retraining for employment, general education and recreation. There is an adult education department in the state education department. Pensions and the state tax exemption of $400 after age sixty-five, allowance for blindness, et cetera, do not provide economic security.

Our state and our state medical society could well spark the study of the gerontology problem in other than the medical phase. Complete and essential medical and health care necessarily include shelter, food, and clothing. In some areas, provision for the bodily comfort of aging persons is being considered a community problem. The city of Kalamazoo, for example, has made a start in providing housing.

THE BECKER REPORT

Effective August 18, 1956, Harry F. Becker, M.D., resigned from the staff of Michigan Hospital Service, severing connection with a study which made history in the field of prepayment of hospital costs. In 1952, at the request of Michigan Hospital Service, the Michigan State Medical Society through its Council appointed a study and survey committee to analyze medical service in hospitals to determine, if possible, the amount and cause of alleged "over utilization." At the expense of Michigan Hospital Service, this committee engaged Dr. Harry F. Becker to conduct the study.

Permission had to be gained for critical examination of twelve thousand consecutive records in twenty-five hospitals. The subject material was the highest type of confidential information. The cases were studied for any indication of misuse or over utilization, excessive medication, unnecessary treatment or surgery, or hospital stay. All this was necessary to determine misuse and the amount.

This material and the conclusions were kept in the most profound secrecy for two reasons: (1) confidential information about hospital patients, and (2) that immature or improper information be not released.

About two years ago, the Michigan State Medical Society committee members visited every county and district medical society in the state giving detailed reports from closely guarded copius notes. In 1954, a lengthy paper was presented to the American Hospital Association. Soon after that release, the Council dissolved its committee without releasing the material. Numerous national magazines, *Reader's Digest*, newspapers, and medical journals, published reports and analyses accusing the doctors of grossly misusing Blue Cross. Pressure groups have asked for the complete study.

Garbled reports of the Becker study, demands of labor leaders, the advice of the insurance commissioner, and a letter from the President of Michigan Hospital Service, and the recurring request from Michigan Hospital Service for increased rates prompted Governor Williams to appoint a study commission "to determine why hospital costs are increasing, and what to do to combat the resulting increase in Blue Cross premium rates." During the resulting hearings of the commission, members again asked for the complete Becker study material. They were not appeased even when told the whole story had been printed repeatedly and that they had been given copies in their prepared material.

The commission at the conclusion of its hearings, including testimony from MHS, MHA, MMS, MSMS and others, announced it was transferring all of its material to Doctor Axelrod, Director of Social Studies of the Department of Public Health, University of Michigan.

Dr. Becker's announced resignation again touched off publicity in the press. Dr. Axelrod resigned from the analyzing group at the University with more insinuations that vital factors were being withheld and that the doctors, through the Michigan State Medical Society were obstructing the study at the University of Michigan. One of the Governor's Commission members and the head of a great pressure group sent letters to the Governor making unfounded accusations. The medical profession has for many years been the victim of just such studied vilification from national government sources as well as firmlly established pressure organizations.

Now is the opportune time, in our opinion, for the Michigan State Medical Society to silence explicitly this particular canard. Dr. Becker's work is done; his conclusions were based on an intimate study of vastly confidential hospital records of thousands of our patients. Let us officially report to the Governor and the pressure groups that all the facts and information have been released, and that the study sheets will not be made available to any person or committee.

AMERICAN MEDICAL EDUCATION FOUNDATION

The medical profession has been advised that our medical schools are sadly in need of money to carry on their work. About ten million dollars a year has been estimated as a suitable sum to insure their continuing well-being. The Federal Government has hinted at subsidies, but our medical economists and statesmen fear the effect on the education and indoctrination which might ensue.

The American Medical Education Foundation which has been established and operating for five years, hopes in 1956 to raise at least $2,000,000 for our schools. Several of our state medical societies have issued special assessments or raised dues to make contributions to this fund. We have urged our Michigan doctors to contribute voluntarily, either through the AMEF or directly to their alma mater, and the results are indicated in the Annual Report for 1955.

One hundred and sixty-one individual doctors contributed $14,859.59 to the AMEF, and 740 individuals contributed $31,036.90 to the Alumni Funds. In the whole United States, some 25,116 individuals gave $757,163.29 to the AMEF and 36,162 gave $1,748,587.46 to the Alumni. Michigan ranks tenth in the total amount given, but down the line in numbers, amount given, or percentage of physicians contributing.

The eighty-two medical schools now receiving help from the professional contribution are training 11,000 graduates, doctors, residents and interns. They give refresher courses to 17,000 and give undergraduate teaching to 27,000, graduating 6,500 annually.

It is hoped members who have given in the past will continue even more generously and that others will join the ranks. And do not forget as

the year draws to a close that the Michigan State Medical Society individually has two other projects worthy of our continued tax-exempt support: The Michigan Foundation for Health Education, c/o E. I. Carr, M.D., Lansing, and the Beaumont Memorial Fund, 606 Townsend St., Lansing. The latter fund is still in the red, and will need support on a continuing basis.

ROBERT H. BAKER, M.D.

Our immediate past president, Robert H. Baker, M.D., died September 6, 1956. Three years ago when he accepted the office of president-elect he knew he might not carry through because of the condition of his health, but chose to give those last years in profound and extensive service to the medical profession and the Michigan State Medical Society which he loved and which had honored him. He was the fifth son of a former Michigan State Medical Society president who had attained the same dignity.

Dr. Baker gave unsparingly of his time and effort in visiting more of the units of the Michigan State Medical Society than any previous president. He always had a good and encouraging word and a pleasant smile even though he knew his time was limited. He served faithfully his year as president-elect and his year as president. He continued in his year of past president until July 1, 1956, when he closed his office and retired from some very important committee work. For years he was secretary and member of the Board of Michigan Medical Service where his advice was always gratefully received.

Bob Baker has passed from our sight but never from our memory.

J. JOSEPH HERBERT

Another column reports the passing of J. Joseph Herbert, for many years attorney of the Michigan State Medical Society. His almost perfect attendance record at Council and Executive Committee meetings, the House of Delegates and many other committees always assured us that we made no mistakes of a legal nature. Policy matters, he always told us, were for our own determination, but that they should be expressed in unmistakable language. Joe, from his long experience, knew and thoroughly understood the problems and ambitions of the medical profession as though it were his own. He was responsible for many innovations in medical-legal affairs. He instituted the conference of medical society attorneys. On the national level, his counsel was repeatedly asked, especially in the matter of mediation committees.

Joe Herbert was always present and generous with his intuitive understanding and advice when asked. His reports to every Council meeting were clear, concise and exact, even when critical, and he was loved by everyone. His presence on our Council can never be replaced.

Joe was a regent of the University and has always been interested in education. Through his efforts, many deserving young people have been able to attend the University. In his home town of Manistique, the "Joseph Herbert Scholarship Fund" has been established in his memory, to which the Council and many of his friends have added their mite.

Joe, we who so loved you in life sadly say farewell.

THE TRANQUILIZING DRUGS

The Food and Drug Administration of the U. S. Department of Health, Education and Welfare is urging a change of dosage of certain drugs previously supposed to be safe. They are prompting all pharmaceutical and medical journals to specify a new dosage of drugs containing reserpine. When first introduced, this drug was supposed to have low toxicity. Several papers at the AMA meeting in Chicago emphasized the importance of appraising the medical profession of the latest information and the potential hazards of continued usage. It has become increasingly apparent that reserpine is not the innocuous substance it was first thought to be—that there are contraindications and the safe level for long-continued administration is much lower than the originally recommended dose.

Some administrators have even contemplated use of these drugs as substitutes for hospitalization, because of the apparently marvelous results. It is the present opinion, however, that, in the treatment of hypertension or of anxiety states on an out-patient basis, the maintenance dose should not exceed 0.25 mg daily. Dosages may vary for patients or conditions and sufficiently constant supervision is necessary. Before attempting maintenance treatment, more explicit information should be obtained from the New Drug Branch, Bureau of Medicine, or other reliable advisors.

Robert H. Baker, M.D.

In Memoriam

Robert H. Baker, M.D., of Birmingham, immediate past-president of the Michigan State Medical Society and one of Michigan's best known surgeons, died September 6 in Pontiac General Hospital, where he was chief-of-staff for many years.

Doctor Baker had practiced medicine in Pontiac from 1920 until his retirement this summer at the age of sixty-four.



About five years ago, Doctor Baker discovered he had cancer. Despite this, he continued his practice and served as MSMS president in 1954-55, the office held many years earlier by his father, Charles H. Baker, M.D., a pioneer otolaryngologist of Northern Michigan.

Through the years, Doctor Baker served the state society in various capacities, including those as vice-speaker and speaker of the House of Delegates and member of The Council and Executive Committee. He had been repeatedly a delegate from Oakland County to the MSMS House of Delegates.

He also served the Oakland County Medical Society as secretary, treasurer and president. Other local society service was devoted to the Executive Committee and for some years the Medical-Legal and Economics committees of his local society. A leader in Oakland civic affairs, he was charter member of the Pontiac Kiwanis Club and Torch Club, having served as president of Torch.

In 1927, he was honored with an appointment as a life fellow of the American College of Surgeons.

Dr. Baker was graduated from the Bay City High School and entered the University of Michigan at seventeen. He received his A.B. degree in 1913 and M.D. degree in 1918. He was on Dr. A. S. Warthin's pathology staff and was elected to Sigma Xi in his senior year. He served a rotating surgical internship at the University Hospital in 1916-1917, was demonstrator in surgery in 1917-18. He was commissioned First Lieutenant in the Medical Corps, U.S.A., in 1918 and attended the Army Medical School in Washington, graduating in orthopedic surgery.

In May, 1919, Dr. Baker returned to the University Hospital as instructor in surgery and completed his graduate training in surgery in July, 1920, immediately prior to his entering practice in Pontiac

He is the author of several scientific papers: "Condyloma of the Bladder," "Treatment of Harelip and Cleft Palate," "Cylindroma of the Tongue," and "Compression Fracture of the Spine."

Doctor Baker is survived by his wife, the former Helen C. Crane, R.N., and the families of his two married children, Donald and Gail.

J. Joseph Herbert

In Memoriam

"You are asked to think of a man. Think of someone, living or dead, whose life has enriched your own." —*Saturday Review of Literature.*

You are asked to do this because just such a man has been removed from our lives. The death of J. Joseph Herbert has terminated a life distinguished by honors and achievements in the legal, legislative, educational and medical worlds.



His humanity, his sympathetic understanding of his fellowmen and the broad scope of his general interest are perhaps related to his background. His father was a doctor of medicine, trained at the University of Vienna with a classical education and a wide knowledge of the humanities which he imparted to his son. Mr. Herbert's far-reaching educational views and his great, general cultural influence were evidenced by his election to the Board of Regents of the University of Michigan, a position he held for sixteen years. This opportunity to serve his Alma Mater was one of his greatest pleasures, and his appointment as chairman of that Board was a cherished distinction. He was a trustee of the National Music Camp at Interlochen, and chairman of the Conference Governing Boards of State-Supported Institutions of Higher Education in Michigan.

All his life he had wanted to be a doctor of medicine but it was due to his father's influence that he studied law. It was this life-long interest in medicine that served him well as legal counsel to the Michigan State Medical Society. As an attorney, he achieved statewide and national distinction.

Because he gave so much of himself to the public in the advancement of civic causes, Mr. Herbert leaves a rich legacy of achievement and honor for us to emulate. He served his country in World War I as an officer. He made such a contribution to the American Legion that he was named State Commander. He was such a valued contributor to the leadership of the Upper Peninsula Development Bureau that he was elected its president. He was legal advisor to the Governor of Michigan. He was an active member of the American and Michigan Bar Associations, the American Judicature Society, the American Law Institute, the American Academy of Political and Social Sciences.

Gentleman, lawyer, civic leader, educator, soldier—in his life we see exemplified the benefits and rewards of the American way of life—the opportunity for the individual to develop to his greatest capacity.

Think of a man? There was a man!

J. H. Fyvie, M.D.

J. Joseph Herbert was born at Indianapolis, Indiana, on August 26, 1894. He attended the public schools in Detroit, graduated from the University of Michigan in 1915 and from its Law School in 1917. He served as Major in the Army during World War I. In 1918, he married Imogene McLeod; they have three children, Catherine, Robin and Mary. He had practiced law in Manistique since 1920. A Republican, he served as Regent of the University from 1939 to 1955, was State Commander of the American Legion and President of the Upper Peninsula Development Bureau.

A RESEARCH MILESTONE

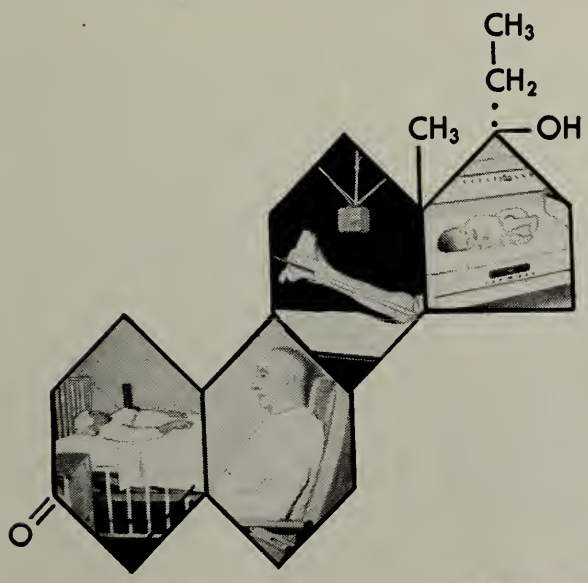
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Searle's New and Practical Steroid Specifically for Protein Anabolism—

It has long been recognized that a substance which would promote protein anabolism would be of inestimable value in therapy. The androgens have this property, but unfortunately they also exert actions on secondary sex characteristics. These effects are commonly undesirable in therapeutic programs.

THE FIRST STEROID WITH ANABOLIC SPECIFICITY—Nilevar, the newest Searle Research development, therefore, meets a long desired clinical need because Nilevar presents the first steroid primarily anabolic for protein synthesis. Moreover, Nilevar is without prominent androgenic effects (only about one-sixteenth of that exerted by the androgens).



OBJECTIVE AND SUBJECTIVE RESPONSE — Orally effective, Nilevar therapy is characterized by retention of nitrogen, potassium, phosphorus and other electrolytes in ratios indicative of protein anabolism. Moreover, subjectively the patient observes an increase in appetite and sense of well-being.

WELL TOLERATED—Nilevar has an extremely low toxicity. Laboratory animals fail to show toxic effects after six months of continuous administration of high dosages. Nilevar should not be administered to patients with prostatic carcinoma. Nausea or edema may be encountered infrequently. Slight androgenicity may be evidenced on high dosage or in particularly responsive individuals.

MAJOR INDICATIONS—Preparation for and recovery from surgery; supportive treatment of serious illnesses (pneumonia, poliomyelitis, carcinomatosis, tuberculosis); recovery from severe trauma and burns; decubitus ulcers; care of premature infants.

DOSAGE—The daily *adult* dose is three to five Nilevar tablets (30 to 50 mg.) but up to 100 mg. may be administered. For *children* the average daily dose is 1 to 1.5 mg. per kilogram of body weight; individual dosages depend on need and response to therapy.

SUPPLY—Nilevar is available in uncoated, unscored tablets of 10 mg. G. D. Searle & Co., Research in the Service of Medicine.

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SEARLE

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

TWENTY-FOUR-HOUR FLU TO BE STUDIED

In a five-year research project financed in part by the U. S. Public Health Service, the twenty-four or forty-eight-hour intestinal flu is to be studied in the Michigan Department of Health Laboratories. A federal grant of $20,596 has been received for the first year of the project.

Though this form of diarrhea lasts only for twenty-four to forty-eight hours, it often reaches epidemic proportions, reducing man-hours on the job and cutting production.

Main objective of the study is to screen out and characterize the virus organisms believed to cause the disease. In their attempt to isolate the viruses involved, the team of laboratory staff members will study blood and stool specimens collected from persons ill with diarrhea. These specimens will be tested, filtered, screened for known virus families and finally used in complicated feeding experiments with human volunteers whose contribution will be to prove whether the isolated viruses actually will cause diarrhea when spread from one person to another.

NEW EIGHT-COUNTY HEALTH DEPARTMENT

Action by the boards of health of District Health Department No. 1 and the Grand Traverse-Leelanau-Benzie Health Department will make possible Michigan's first eight-county health department. District Health Department No. 1 takes in Kalkaska, Crawford, Missaukee, Roscommon and Wexford Counties. The new department will begin functioning as soon as a medical director is chosen. It is of interest as exemplifying a way of spreading the benefits of trained medical supervision over a larger area.

POLIO VACCINE URGED FOR 25-29 AGE GROUP

With poliomyelitis vaccine now available through commercial channels, physicians are urged to give special attention to immunizing the twenty-five through twenty-nine-year-age group. Mortality in this group now accounts for nearly 20 per cent of the total mortality from the disease. With younger ages increasingly protected, this percentage may rise.

BIRTHS STILL RISING

July set a new record for births in the record-breaking upward trend. It recorded 18,064 births, a new all-time high for a single month.

From January 1 through July, 110,456 babies were born in Michigan. This was 3,284 more than were born during the same period of 1955.

The year 1955 set its own new one-year record of 195,022 births. If the present rate of births continues through December Michigan's total for 1956 will exceed 200,000 for the first time in the state's history.

AIR SAMPLING PROGRAM EXPANDED

Increased activity is under way in Michigan in air sampling to determine the degree of air pollution and its possible effect on health.

The Michigan Department of Health is arranging for establishment of new air sampling stations in Grand Rapids and at three other points in the state. A station is already operating in Detroit. The number of stations is expected to be increased to twelve in 1957.

The air sampling program now being expanded in Michigan is part of a five-year national project carried on since 1953 by the U. S. Public Health Service. In the last three years, air sampling stations have been set up in most of the states and now extend from Anchorage, Alaska, to Boston. Steady expansion of the program is planned.

At each station, a twenty-four-hour sample of air is taken once each week, or every two weeks. The sampling consists of pumping air through an 8 x 10-inch fiberglas filter. Most of the sampling machines are located on the roofs of buildings in downtown areas.

After the sample is taken, the filter is mailed to the Robert A. Taft Sanitary Engineering Center at Cincinnati for analysis by U. S. Public Health Service personnel. The sample is tested with the latest scientific equipment and procedures for all known air pollutants, including radioactivity.

The samples will show national air pollution trends and are expected to indicate whether action on air pollution is necessary in a particular locality. Results also will be studied to see if there is a link between air pollution and the rates of disease and death.

Results of the samplings in Michigan will be made available quarterly to the Michigan Department of Health and to health officials where sampling stations are located.

A joint U. S.-Canada air pollution study has been in progress since July 15, in which the Michigan Department of Health and Wayne State University have been surveying industries in the Detroit metropolitan area. The project also covers Windsor and parts of Oakland and Macomb counties.

Bones of the lumbar spine, the pelvis, and upper femur are frequent sites of metastasis; therefore, backache, pelvic pains and sciatica are common complaints in prostatic cancer.



Trasentine®-Phenobarbital

integrated relief . . .
mild sedation
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Serving Metropolitan Detroit and Michigan almost a century

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. NEWS MEDICAL

MICHIGAN AUTHORS

John S. DeTar, M.D., Milan, is the author of an article entitled, "Preserving the GP's Hospital Staff Privileges," published in the *Journal of the Iowa State Medical Society,* August, 1956.

O. T. Mallery, Jr., M.D., Ann Arbor, is the author of an article entitled "Panel on Periodic Examinations," presented as part of a symposium on "The Effectiveness of Periodic Medical Evaluation in the Maintenance of Health and the Early Detection of Disease," at the Industrial Health Conference, Philadelphia, April, 1956, and published in *Industrial Medicine and Surgery,* August, 1956.

Samuel J. Nichamin, M.D., Detroit, wrote an article entitled, "Kartagener's Syndrome in a Newborn Infant," which was published in the *Journal of the American Medical Association,* July 7, 1956.

John R. Rodger, M.D., Bellaire, is the author of an article entitled, "The Sleepy Driver as a Preventive Medicine Problem," published in *GP,* August, 1956.

A. Ray Hufford, M.S., M.D., Grand Rapids, is the author of an article entitled "Clinical Evaluation of Monodral in the Treatment of Gastrointestinal Diseases," published in *The American Journal of Gastroenterology,* August, 1956.

Ingeborg Krieger, M.D., Walter L. Anderson, M.D., and **M. J. Kelson, M.D.,** Detroit, are the authors of an article on "Diabetes in a One-Year-Old Infant," published in *Harper Hospital Bulletin,* July-August, 1956.

W. S. Carpenter, M.D., and **Paul J. Connolly, M.D.,** Detroit, are the authors of an article entitled "The Ileocolic Segment as a Substitute Gastric Reservoir," published in *Harper Hospital Bulletin,* July-August, 1956.

Wilfred Riddell, M.D., Detroit, is the author of an article entitled "Tinnitus," published in *Harper Hospital Bulletin,* July-August, 1956.

Richard S. Johnson, M.D., Detroit, prepared an article entitled "Pheochromocytoma Complicating Pregnancy," which was published in *Harper Hospital Bulletin,* July-August, 1956.

Harold F. Falls, M.D., Ann Arbor, is the author of an article entitled "Genetic Prognostication and Counseling in Ophthalmology," published in Transactions of The American Academy of Ophthalmology and Otolaryngology, July-August, 1956.

William U. McReynolds, M.D., M.S., Quincy, Ill., **William H. Havener, M.D., M.S.,** Columbus, Ohio, and **John W. Henderson, M.D., Ph.D.,** Ann Arbor, prepared an article entitled "Hazards of the Use of Sympathomimetic Drugs in Ophthalmology," which was published in the August, 1956, issue of the A.M.A. Archives of Ophthalmology.

Ralph H. Pino, M.D., Detroit, is the author of an article entitled "Distribution Responsibilities of the Specialties Represented in the Scientific Assembly," published in AMA Archives of Ophthalmology, August, 1956.

John R. Rodger, M.D., of Bellaire, is author of an original article "The Sleepy Driver as a Preventive Medicine Problem," which appeared in "GP" August, 1956, the official publication of the American Academy of General Practice.

* * *



Otto O. Beck, M.D.

Otto O. Beck, M.D., Birmingham, Past President of the Michigan State Medical Society, is Chairman of the 1957 Michigan Clinical Institute, to be held at the Sheraton-Cadillac Hotel, Detroit, March 13-14-15.

Wm. M. LeFevre, M.D., Muskegon. is Chairman of the Program Committee. Dan W. Myers, M.D., Detroit, is Chairman of the Color TV Program Committee. The closed circuit color television program, to be broadcast from the downtown Grace Hospital to the Grand Ballroom of the Sheraton-Cadillac Hotel, is sponsored by Smith, Kline & French Laboratories, Philadelphia.

* * *

W. M. LeFevre, M.D., of Muskegon, and **R. L. Mainwaring, M.D.,** of Allen Park, were appointed by the MSMS Executive Committee of The Council as MSMS representatives to the American Association of Blood Banks.

* * *

A Maternal Health Day program was held at Hurley Hospital, Flint, October 17. The following speakers participated: **Charles A. Behney, M.D.,** Lansing; Allan C. Barnes, M.D., Cleveland; Thomas E. Shaffer, M.D., Columbus; **Norman F. Miller, M.D.,** Ann Arbor; **Helen M. Wallace, M.D.,** Ann Arbor.

* * *

"How the Doctor Examines Your Heart" is an illustrated booklet recently issued by the Michigan Heart Association. Copies may be obtained by writing the Association at 3919 John R. Street, Detroit 1, Michigan.

(Continued on Page 1252)

IF YOUR PATIENT WANTS TO DRINK THAT'S HIS BUSINESS
IF HE WANTS TO QUIT that's our BUSINESS

BRIGHTON HOSPITAL, now in operation for more than three years, wishes to thank the physicians of Michigan and Ontario for the good reception and the confidence given to us.

We know that today's physician recognizes the many-sided nature of the disease—Alcoholism. Beyond the physical, which requires expert treatment in itself, the alcoholic's physician is plagued, we know, with the equally vital aspects, which make demands on his time and attention, of the emotional, spiritual and mental sickness he notes in his patient.

We believe that Brighton Hospital offers the answer. Physicians can now send their alcoholic patients to Brighton with the certain assurance that they will find expert medical and nursing attention AND that, if they so desire, patients will be thoroughly indoctrinated with the program of Alcoholics Anonymous.

BRIGHTON HOSPITAL is NOT interested in the patient who merely wishes to be dried out in order to resume drinking. We ARE interested in those patients who really, fervently, seek complete rehabilitation and a way of life FREED from alcohol.

BRIGHTON HOSPITAL is owned and operated by MICHIGAN ALCOHOLIC REHABILITATION FOUNDATION, a non-profit organization devoted to the best possible hospitalization of the alcoholic who seeks to stop drinking.

DOCTORS, we are here to serve you. We are here to serve your patients.

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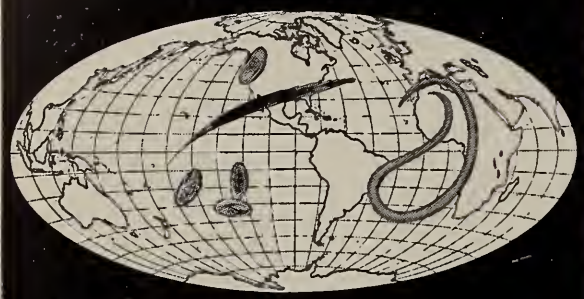
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and control of
Gastric Hyperacidity

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Bottles of 4 fluid ounces, 1 pint and 1 gallon.

*TABLETS OF 'ANTEPAR' Citrate brand Piperazine Citrate

250 mg. or 500 mg., Scored

Bottles of 100.

Pads of directions sheets for patients available on request.

BURROUGHS WELLCOME & CO. (U. S. A.) INC.
Tuckahoe, New York

(Continued from Page 1250)

Arthur L. Crampton is the new Executive Director of the Michigan Division, American Cancer Society, with headquarters in Grand Rapids. Mr. Crampton comes from Flint where he served fourteen years as Executive Secertary of Flint's YMCA. He succeeds Mrs. Harold H. Cornelius, who resigned after ten years' service for the Division.

Diabetes Week is November 11-17, 1956. This is the time when every man, woman and child should take a diabetes detection test.

Discovered early and with proper medical treatment, a person with diabetes may live a practically normal life.

Neglect of diabetes can lead to serious or even fatal complications.

Doctor, pass this word along to *all* your patients.

For literature on the Diabetes Detection Drive, write the American Diabetes Association, Inc., 1 East 45th Street, New York 17, New York.

Charles S. Cameron, M.D., Medical and Scientific Director and Vice President of the American Cancer Society, recently resigned to become Dean of Hahnemann Medical College of Philadelphia, his alma mater. Dr. Cameron served with the American Cancer Society since 1945 and contributed significantly to its progress in the worldwide cancer control effort. Dr. Cameron's latest book, "The Truth About Cancer," was reviewed in the July JOURNAL (Page 885).

* * *

Paul R. Dumke, M.D., Detroit, has been appointed Associate Editor of *Survey of Anesthesiology,* a new journal scheduled for publication in February, 1957, by Williams & Wilkins Company of Baltimore.

* * *

Looking Back: 1926—collapse of the Florida boom. A radio network called NBC is created. The taxes are cut and Smith and McAdoo announce they will run again on the Democratic ticket. A building slump is in the offing.

1936—business is better and a boom is being anticipated despite sitdown strikes. Spain has a bloody civil war. Hitler moves into the Rhine country without resistance. Landon is easily defeated by Roosevelt.

1946—postwar readjustment and shift-over with speedy reconversion to civilian goods. Controls of prices and wages are abandoned—and up go prices. Lots of strikes, including the steel shutdown and also the seizure of the coal mines.

* * *

The American Goiter Association offers the Van Meter Prize Award of $300.00 and two honorable mentions for the best essays submitted concerning original work on problems related to the thyroid gland.

For full information and application blanks write John C. McClintock, M.D., Secretary, 149½ Washington Avenue, Albany 10, New York.

* * *

The Michigan Association of Blood Banks will hold its first scientific meeting on November 3, 1956, at the Lafayette Clinic Building, Wayne State University College of Medicine, Detroit, Michigan. On November 2, the entire day will be devoted to a workshop for blood bank technicians. Registration has been limited to twenty technicians from banks who are members of the Michigan Association of Blood Banks. This workshop has already been over subscribed and will be repeated in the future. A round table luncheon discussion will be held at Wayne State University College of Medicine cafeteria, to be followed by a short business meeting. The following is a tentative list of the speakers and subjects:

A.M.		
9:30	Dr. D. H. Kaump	Joint Blood Council
10:00	Dr. O. Vander-Velde	North Central District Blood Bank Clearing House
10:30	Dr. Wolf W. Zuelzer	Laboratory Diagnosis of ABO Hemolytic Disease of Newborn
11:00	Dr. Lee A. Hyndman	Fibrinogen
11:30	Dr. Phillip Levine	Low-incidence Factory and Genotypes
P.M.		
12:00		Round Table Luncheon Discussions
2:10	Dr. James J. Griffitts	Rationale of Techniques
2:40	Dr. Paul E. Hodgson	Role of Packed Cells in Transfusion therapy
3:10	Dr. O. A. Brines	Thymol Turbidity Test
3:40	Dr. Julius Rutzky	Hemolytic Anemia
4:10	Dr. Donald Albert	Renal Physiology in Hemolytic Transfusion Reaction
4:50		Business Meeting

Reservations for the luncheon may be obtained by writing to J. A. Kasper, M.D., c/o Bon Secours Hospital, 468 Cadieux Road, Grosse Pointe, Michigan.

* * *

Medical Care for Service.—Public Law 569, just enacted, authorizes the Secretary of Defense to provide medical care and hospitalization of military dependents by civilian resources at government expense. It also sets a pattern for benefits which may be obtained at military medical facilities. The civilian care program is now being planned by the Defense Department in cooperation with organized medicine. It must be inaugurated by December 8, 1956, or earlier.

An advisory group has been selected to confer with the Defense Department on the medical care program. Its membership consists of: AMA—Edwin S. Hamilton, M.D., and Hugh H. Hussey, M.D.; AHA—Ray E. Brown and Albert W. Snoke, M.D.; ACS—Paul R. Hawley, M.D., and L. Howard Shriver, M.D.; ACP—

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Bumbalo, T. S., Gustina, F. J., and Oleksiak, R. E.: J. Pediat. 44:386, 1954.

White, R. H. R., and Standen, O. D.: Brit. M. J. 2:755, 1953.

against ROUNDWORMS

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Brown, H. W.: J. Pediat. 45:419, 1954.

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Wallace M. Yater, M.D., and Richard A. Kern, M.D.; AAGP—Malcomb E. Phelps, M.D., and Francis T. Hodges, M.D.; American College of Radiology—Howard B. Hunt, M.D., and Warren W. Furey, M.D.; Health Insurance Association of America—Edwin A. Faulkner and Steven D. Williams; Blue Cross—E. A. Van Steenwyk; Blue Shield—Donald Stubbs, M.D.; Co-operative Health Federation—Dean A. Clark, M.D. The representative for the American Dental Association has not yet been designated.

* * *

Report of Scientific Director, Tobacco Industry Research Committee.—Two years ago the tobacco industry organized the Scientific Advisory Board to the Tobacco Industry Research Committee, with Clarence Cook Little, Sc.D., as Chairman. This committee was to augment and conduct a research that would contribute constructively to our search for answers to our fundamental health problems, specifically the effects of tobacco use. $1,200,000 has been expended, and there is another appropriation of one and one-half million available. Fifty-six research projects have been established throughout the United States—none in Michigan. A special committee, however, on tissue culture research, which met in New York City for an information conference, exchange of views, and discussion, included **Lawrence Berman, M.D.**, professor of medicine at Wayne State University College of Medicine.

* * *

The American Academy of General Practice has occupied its new headquarters building in Kansas City. Dwight H. Murray, M.D., Napa, California, president of the American Medical Association, was the principal speaker at the dedication.

The building is finished in brick, Indiana limestone, and Minnesota granite, and has four floors, a first, second, basement and sub-basement. It contains 30,000 square feet of floor space and provides off-the-street parking for forty cars. The Academy now has more than 21,000 members, with a headquarters staff of sixty-four in Kansas City, and ten in Washington, D. C.

The appointments are unique, with a T-shaped building, tempered glass stairway panels, air conditioning. The basement floor includes a complete kitchen and employes' dining room, and a second conference room that can accommodate 200 people, and automatic addressing equipment.

* * *

National Library of Medicine.—Public Law 941 reconstitutes the Armed Forces Medical Library as the National Library of Medicine, authorizes the erection of a new building, and the appointment of a seventeen-member board of regents, of whom seven will be *ex-officio* Federal officials and ten will be appointed by the President. This committee will be authorized to determine location and to plan and draw up specifications. The sum of $350,000 has been granted by Congress for this purpose.

* * *

Medical Benefits in U. S. Foreign Service.—Public Law 828 authorized additional medical expense protection to U. S. foreign service employes and their

(Continued on Page 1256)

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ACHROCIDIN is a comprehensive formula for treatment of complications of the common cold, particularly when bacterial sequelae are observed or expected from the patient's history or during widespread infections.

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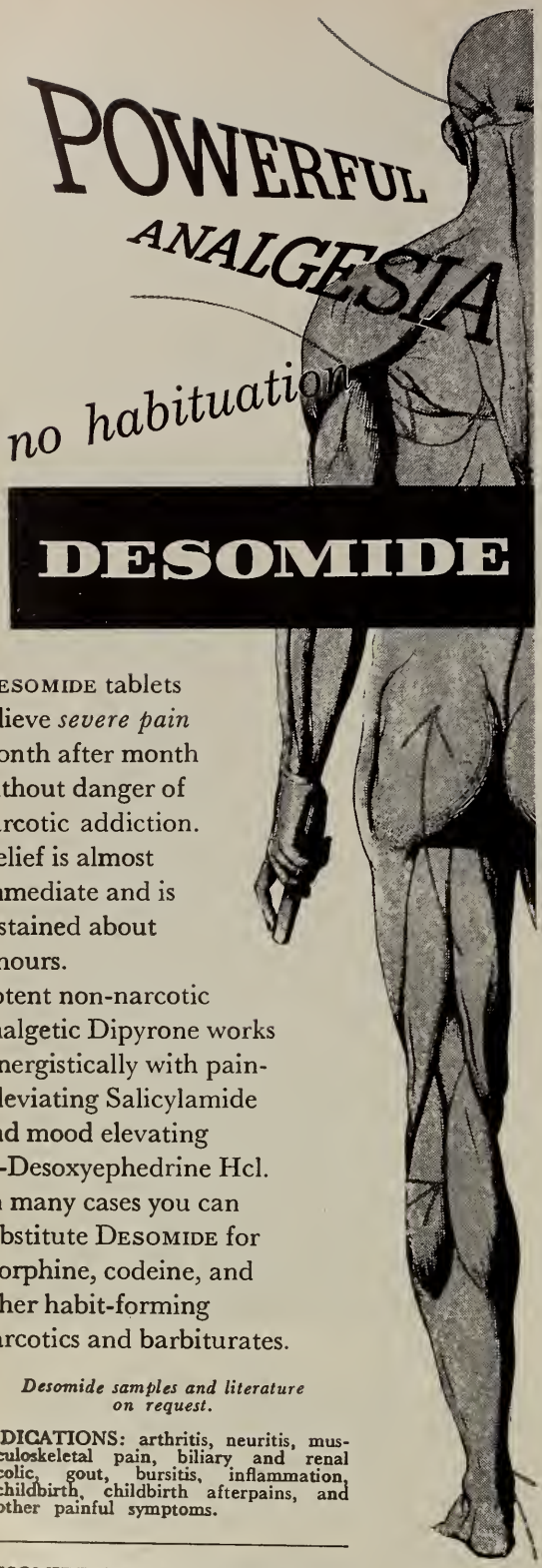
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(Continued from Page 1254)

dependents stationed abroad. Full medical and hospital expense coverage up to 125 days' treatment (with a $35 deductible) has been provided for. This includes pay for costs of necessary medical travel by dependents as well as employes.

* * *

"A Place to Live" is a new documentary film about the aged, prepared by the Committee on Aging of the National Social Welfare Assembly, New York. The film was produced to provide better understanding of this subject for the medical profession, gerontologic groups and the public. Three years of research study by the Committee provided the background for the film. While it does not answer all the personal problems of older people, this film does represent a step toward eventual solution, which can only come about through continued research and proper planning. The film may be procured from the Wm. S. Merrell Company, Geriatric Film Library, Cincinnati 15, Ohio.

* * *

The National Foundation of Infantile Paralysis has announced a series of fellowships for post-doctoral study. For a full academic program, tuition and fees are paid; for other programs, a sum not to exceed $1,250 per year is granted, including tuition. Fellowships are offered in research, rehabilitation, psychiatry, orthopedics and the management of poliomyelitis. Financial benefits vary from $3,600 to $6,000 a year.

* * *

Dental Research Team Hard at Work.—A University of Michigan dental research team is hard at work on a project which they hope will give the people of Michigan the opportunity to replace lost teeth with normal, living teeth. Preservation of more natural teeth by transplantation would promote the general good health of the bone and soft tissues which support the teeth.

According to James K. Avery, D.D.S., assistant professor of dentistry and project director, it is possible to transplant teeth in humans. It has been done successfully in selected cases of young adults.

The transplantation of teeth is only one part of the project, which is being financed by an $8,000 research grant from the State Legislature. While the details and problems found in transplantation are being worked out by the oral surgery department, Dr. Avery is directing a laboratory staff in the search for an effective method of storing and preserving teeth.

* * *

Mississippi Valley Conference on Tuberculosis.—Scheduled to speak at the three-day Mississippi Valley Conference on Tuberculosis held in Detroit October 11-13, was Senator Charles Potter who gave the keynote address; Robert J. Anderson, M.D., of the U.S. Public Health Service; James E. Perkins, M.D., managing director of the National Tuberculosis Association; Edna M. Jones, M.D., Detroit; and Huge E. Burke, M.D., of Montreal.

The Michigan Tuberculosis Association's annual meeting was held in conjunction with the Mississippi Valley Conference. Richard L. Lea, Executive Secretary of the Tuberculosis and Health Society of Wayne County, was the arrangements chairman.

Say you saw it in the Journal of the Michigan State Medical Society

G. L. Waldbott, M.D., Detroit, has been invited to participate in the symposium on bronchial asthma at the Fourth Congress of Internal Medicine, September 25, 1956, in Madrid, Spain, with a discussion on "New Trends in the Treatment of Bronchial Asthma." He will also present a paper on "Incipient Chronic Fluoride Intoxication from Drinking Water," before another section of this meeting.

* * *

The Interstate Postgraduate Medical Association of North America meets in Cleveland, Ohio, October 22-25, 1956. The program lists an address by **Claire L. Straith, M.D.**, Detroit, "The Treatment of Congenital and Traumatic Deformities." Exhibits are listed in "Plastic and Hand Surgery," The Straith Clinic, Detroit; "Gouty Arthritis," **Dwight C. Ensign, M.D.**, and **John W. Sigler, M.D.**, Henry Ford Hospital, Detroit; and "Oral Penicillin V in the Treatment of Bacterial Endocarditis," **L. Quinn, M.D., J. M. Colville, M.D., Frank Cox, Jr., M.D.**, and Joseph Truant, Ph.D., Henry Ford Hospital, Detroit.

* * *

Five Michigan doctors received citations for attending ten or more meetings since 1940: **James R. Jeffrey, M.D.**, Battle Creek; **Wm. J. Klerk, M.D.**, Kalamazoo; **Allan R. Peterson, M.D.**, Daggett; **Geo. W. Sippola, M.D.**, Detroit; and **Virgil E. Stover, M.D.**, Grand Rapids.

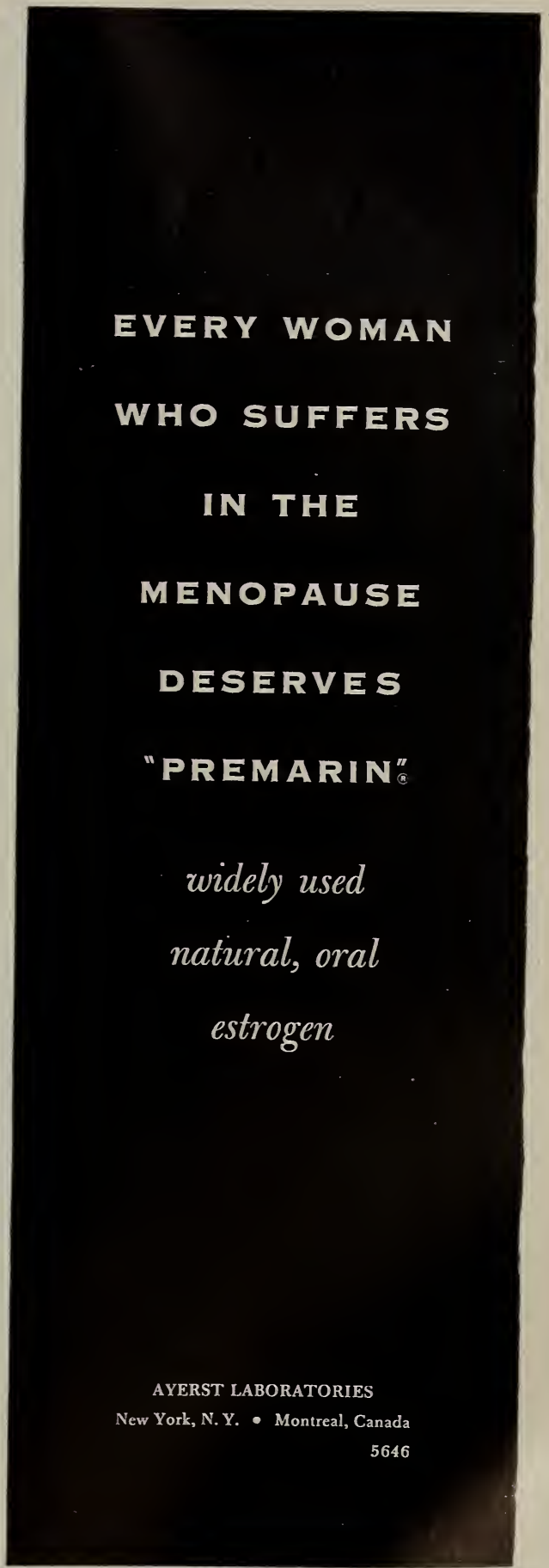
* * *

The Fifth Annual Clinical Meeting of the American College of Obstetricians and Gynecologists will be held at the Palmer House in Chicago, November 7-9, 1956. The chairman and vice chairman of one of the sections will be Cleary N. Swanson, M.D., and Leonard Heath, M.D., both of Detroit. Norman F. Miller, M.D., Ann Arbor, is vice president of the College, and C. Paul Hodgkinson, M.D., Detroit, is secretary.

* * *

The American College of Physicians has been awarded a research grant of $43,100.00 for the period September 1, 1956, through August 31, 1957, by the Department of Health, Education, and Welfare of the Public Health Service in furtherance of its project to evaluate internal medicine in hospitals. This project, "to establish a minimal standard of quality and efficiency of the practice of internal medicine in hospitals," was initiated in early 1956, by the College's Committee on Criteria for Hospital Accreditation, under the chairmanship of Dr. Arthur R. Colwell, Sr., F.A.C.P., Chicago.

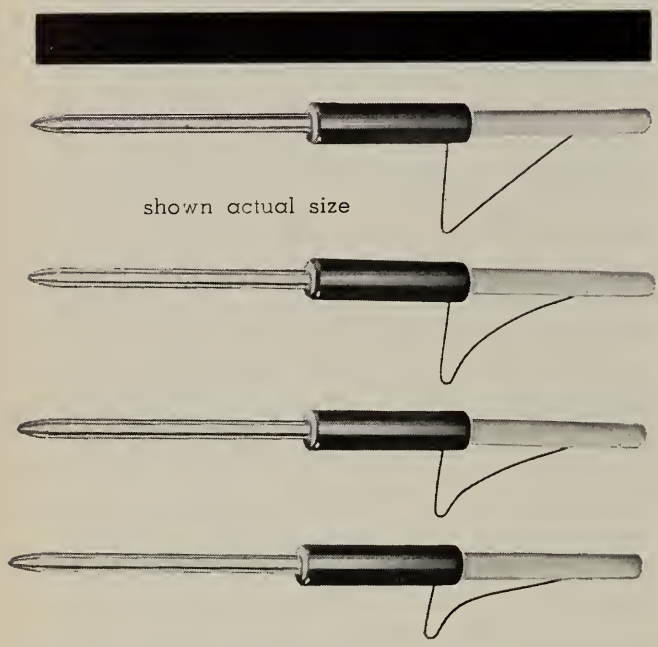
The director of the study is Dr. Marion A. Blankenhorn, F.A.C.P., Cincinnati, who is devoting his full time to the project. A pilot study of approximately one hundred representative hospitals is being conducted by observing practice methods with particular reference to internal medicine. Twenty or more mature and responsible physicians are being sent to selected sites to observe current practices; to record the type of patient admitted to a hospital, the diseases, length of stay and the means employed for diagnosis and treatment; and to classify findings—viz., approved, provisionally approved, and not approved. A search is being directed to the mechanics of internal medicine, especially the use of clinical laboratory devices; habits of consultation,



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and use of ancillary skills such as physical medicine, rehabilitation, preventive medicine and others.

Appraisal of medical care will be the primary objective. Close liaison will be maintained with the Council on Medical Education and Hospitals of the American Medical Associations and appropriate committees in the Association of American Medical Colleges.

* * *

Military Medicine.—The Sixty-third Annual Convention of the Association of Military Surgeons is called for Washington, D. C., November 12, 13, 14, 1956. Reserve medical officers and officers of the military service on inactive duty will be given attendance point credits for attendance, if requested. This includes eligible physicians, dentists, non-veterans, et cetera, of the Army, Navy or Air Force.

* * *

Department HEW.—Announcements are made of competitive examinations to be held November 27-30, 1956, for appointment as medical officers to the regular corps of the United States Public Health Service.

* * *



Tuberculosis patients who leave the sanatorium before their treatment is completed often are under the impression that drugs alone are sufficient to complete their cure. About drug treatment, Dr. J. Arthur Myers, of Minneapolis, Minnesota, in the April, 1956, issue of the *Journal Lancet,* says, "Evidence is accruing to suggest strongly that antimicrobial drugs do not have the permanent effect that was earlier anticipated. . . . Therefore, persons thought to have been 'cured' are still harboring organisms which may still result in reactivations of old lesions and development of new ones. Indeed, such evidence is already apparent on a large enough scale to cause alarm."

MICHIGAN TUBERCULOSIS ASSOCIATION

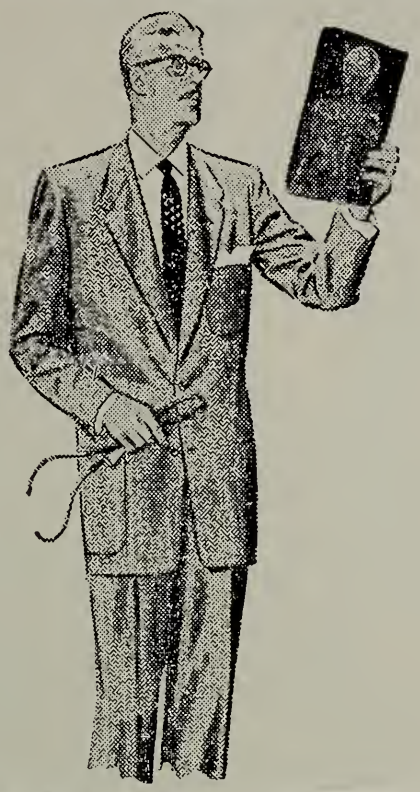
* * *

Medical research was given a big boost at Wayne State University's College of Medicine in September when it received $353,163.85 in research and education grants. The U. S. Public Health Service, National Institute of Health, awarded the medical school and the College of Nursing $338,247 for twenty-six different projects. The Michigan Heart Association gave $69,881 in ten research grants.

Largest single grant of $51,892 was made by the American Cancer Society for research entitled "Experimental Pulmonary Cancer Induced by Compounds of Beryllium in Albino Rats" directed by Dr. Arthur Vorwald. Neurologic research will be continued with the help of a $39,000 grant from the Kresge Foundation. Markle scholar, Dr. Alfred J. Bollet will continue arthritis research with a $24,630 grant from the Michigan chapter, Arthritis and Rheumatism Foundation. This Foundation also gave $8,500 for arthritis research directed by Dr. Ernest Gardner.

Dr. Harper K. Hellems will direct research in hemo-

(Continued on Page 1260)



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(Continued from Page 1258)

dynamic aspects of cardiac and pulmonary disease with $12,848 from the Michigan Heart Association.

A $25,000 grant from the U. S. Public Health Service to continue undergraduate training in psychiatry will be directed by Dr. John M. Dorsey.

The College of Nursing's program of training undergraduates, graduate nurses and aides in psychiatry will continue with $111,148 from the United States Public Health Service.

* * *

September is "Sight Savings Month." This project is sponsored by the National Society for the Prevention of Blindness.

* * *

The TB death rate in Michigan reached a new low of 6.6 per 100,000 population in 1955. The number of deaths from TB, 478, was also an all time low. However, the 478 TB deaths were more than the total deaths caused by all other communicable diseases.

* * *

The American College of Surgeons has arranged six sectional meetings for 1957. Those closest to Michigan are in Washington, D. C., March 18-20; Toronto, Ontario, March 25-27; St. Paul, Minnesota, April 8-10. For full information and program write to the American College of Surgeons, 40 East Erie Street, Chicago 11, Illinois.

* * *

USPHS Surgeon General.—Leroy E. Burney, M.D., a career man in the Public Health Service, was appointed Surgeon General to succeed Leonard A. Scheele, M.D., resigned. Dr. Burney is forty-nine years of age, comes originally from Indiana, and for nine years was Commissioner of Health in Indiana, on loan from the U. S. Public Health Service.

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Much depends on the attitude of the individual physician toward his local plan. If the doctor fails to acknowledge Blue Shield as his own, if he declines to accept the responsibilities of a participating physician, or if he uses the Blue Shield payment merely as a platform upon which to charge a higher fee, then he should not be surprised if some of his friends conclude

(Continued on Page 1262)

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1. Pollock, B. E., and Pruitt, F. W.: Am. J. M. Sc., 226:172, 1953.

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(Continued from Page 1260)

that Blue Shield is operated largely for the doctor's benefit.

But if the physician looks upon himself not as the owner but as the trustee of Blue Shield, if he speaks well of the plan, if he tries to help his patients understand the plan and use it intelligently—then the patient will identify Blue Shield with the idealistic traditions and purposes of medicine.

Blue Shield *is* the "doctors' plan," not in the sense that the doctor owns it, but because he has organized it to help him serve his patients more satisfactorily. It is the "doctors' plan" because the doctor is responsible for it, and because Blue Shield is an impressive proof of the doctors' concern for the welfare of the people.

Blue Shield now serves the vital needs of more than thirty-seven million Americans. Thirty-seven million Americans can't be wrong, and their support of this program represents a tremendous popular vote of confidence in the medical profession. In a sense, Blue Shield is a bond of mutual benefit between the profession and the people.

Your Blue Shield Plan may not be all that you would like it to be, but it is yours—to strengthen and improve. It is the medical profession's best answer—so far—to the challenge confronting the profession, to prove that we can solve our own problems by voluntary co-operation with industry, labor and the public. What Blue Shield may become is largely up to *you!*

CANCER COMMENT

(Continued from Page 1154)

unlock the secret of cancer. The protracted uncertainties facing investigators who depend on annual grants is believed to have a deleterious effect on the long range prospects of cancer research. Such dependence is too apt to lead to overemphasis on the obvious and superficial and neglect of the far more time-consuming, difficult, exacting and ingenious research that leads to major advances.

Communication

CORRECTION

Dear Doctor Haughey:

I should appreciate correction of two inaccuracies and omissions which appear in the latest issue of THE JOURNAL of the Michigan State Medical Society, on pages 866 and 868.

At the Third National Cancer Congress, the paper on "Results of Screening Asymptomatic Patients for Uterine Cancer" was given by me, not by Dr. Harry Nelson. (See pages 83 and 89 of the complete and *final* version of the program of this Congress.)

Also, at the Annual Clinic Day program of Wayne University College of Medicine, I presented a paper on "Early Diagnosis of Carcinoma of the Cervix Uteri."

Very truly yours,
ESTHER H. DALE, M.D.
Associate Professor, Pathology
Wayne State University
College of Medicine

August 10, 1956

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*Griffith, G. C.; Dimitroff, S. P., and Thorner, M. C.: Ann. Int. Med. 45:7, 1956.

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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

THE FIRST TWENTY-FIVE YEARS. The Story of a Foundation. Battle Creek: W. K. Kellogg Foundation, 1956.

THE ORIGINAL HAS THIS SIGNATURE, W. K. KELLOGG. Horace B. Powell. Englewood Cliffs, N. J.: Printice-Hall, Inc., 1956.

BRAIN MECHANISMS IN DIACHROME. Wendell J. S. Krieg, B.S. in Med., Ph.D., Professor of Anatomy, formerly Professor of Neurology and Director of the Institute of Neurology, Northwestern University Medical School. Illustrated by the author. Evanston, Illinois: Brain Books, 1956. Price: single copies, $7.00; ten or more, $6.00.

HYPOTENSION. Shock and Cardiocirculatory Failure. Paul G. Weil, M.D., Ph.D., Director of Transfusion Service, Royal Victoria Hospital, Montreal, Canada. Philadelphia and Montreal: J. B. Lippincott Company. Price $2.25.

COMPETITIVE PRESSURE AND DEMOCRATIC CONSENT. Morris Janowitz and Dwaine Marvick. University of Michigan, Michigan Governmental Studies, No. 32. An Interpretation of the 1952 Presidential Election. Morris Janowitz is Associate Professor of Sociology and Research Associate, Institute of Public Administration, University of Michigan, and Dwaine Marvick is Assistant Professor of Political Science, University of California (Los Angeles). Ann Arbor: Bureau of Government, Institute of Public Administration, University of Michigan, 1956. Price $2.75.

CIBA FOUNDATION COLLOQUIA ON ENDOCRINOLOGY. Volume Nine, Internal Secretions of the Pancreas. Editors for the Ciba Foundation: G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch., and Cecilia M. O'Connor, B.Sc. 100 illustrations. Boston: Little Brown and Company. Price $7.00.

This Ciba publication is much like the several which have preceded it. It reports and presents the material presented at the Colloquia on "The Nature and Actions of the Internal Secretions of the Pancreas," held June 21-23, 1955. These are small international conferences held in London. The Foundation has held thirty-six such conferences and provides leadership and recommendations.

Twenty major topics were presented and fully discussed. Twenty-eight authorities are listed as having attended, including nine from the United States. The book is timely and well executed.

CIBA FOUNDATION COLLOQUIA ON AGING. Volume Two. Aging in Transient Tissues. Editors for the Ciba Foundation: G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch, and Elaine C. P. Millar, A.H.W.C., A.R.I.C. 96 illustrations. Boston: Little Brown and Company. Price $6.75

This is the second annual Ciba Foundation (of London, England) Colloquia on Aging, held July 5-7, 1955. This one deals with changes in transient body tissues, the normal life of which is less than that of the

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organism of the whole. Twenty-seven authors participated, of whom seven were from the United States. The process of aging is attracting more attention all around the world, and this book gives a good look at the accepted ideas.

PROCEEDINGS, WORLD CONGRESS OF ANESTHESIOLOGISTS. Scheveningen, The Netherlands, September 5-10, 1955. Edited and published by the International Anesthesia Research Society Official Organ: Current Researches in Anesthesia and Analgesia, Cleveland, Ohio. Minneapolis: Burgess Publishing Company, 1956.

This paper-covered book gives in English the papers presented at the World Congress of Anesthesiologists held in The Netherlands September 5-10, 1955.

Twenty-six nations, including Canada, were represented by delegates. Sixteen nations, including the United States, attended by observing. Papers are presented with illustrations and drawings occupying two to three pages each, with thirty-two papers altogether.

In spite of the observing status, there were twenty-nine American names signed as authors or co-authors of contributions. It is a very interesting presentation.

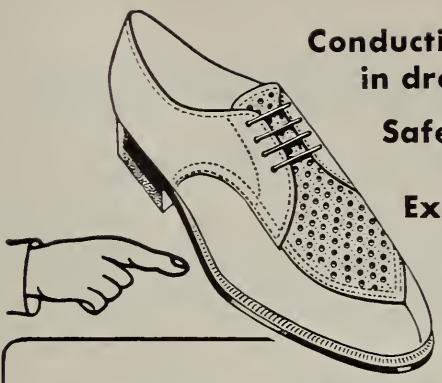
HISTAMINE. Ciba Foundation Symposium on Histamine, jointly with The Physiological Society and The British Pharmacological Society, in honor of Sir Henry Dale, O.M., G.B.E., M.D., F.R.C.P., F.R.S. Editors for the Ciba Foundation: G. E. W. Wolstenholme, O.B.E., M.A., M.B., B.Ch., and Cecilia M. O'Connor, B.Sc. 133 illustrations. Boston: Little, Brown and Company, 1956.

The Ciba Foundation, an English organization, conducted a symposium on histamine, jointly with the Physiological Society and the British Pharmacological Society, at the Wellcome Foundation, April 6 and 7, 1955. All the papers presented at that time are contained in this volume. The attendance was over 300, but each session was necessarily limited to thirty. Six American essayists were invited and participated. As usual, this symposium volume is very well done, in good readable type, well illustrated, and the material presented is always of current importance. The paper by Charles F. Code, M.D., of the Mayo Clinic, on "Histamine and Gastric Secretion," occupies eighteen pages, and presents a vast amount of research and reports and includes eleven tables. Floyd C. McIntyre, M.D., of North Chicago, had a paper on "The Mode of Histamine Binding in Animal Tissues," illustrated by two tables.

This gives an idea of the intense value of their effort.

OF WATER, SALT AND LIFE. An Atlas of Fluid and Electrolyte Balance in Health and Disease. Milwaukee: Lakeside Laboratories, Inc., 1956. Price $7.50.

This book is an atlas of water and fluid balance as it occurs in many different bodily conditions of health and disease. The text is mostly descriptive, explains various conditions, and is illustrated in thirty-one four-color full page plates. It is a compendium of facts difficult to assemble in any other way and most valuable.



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©1956, by Michigan State Medical Society.

Published monthly hy the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 14, Minnesota.

Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103 Act of Octoher 3, 1917, authorized August 7, 1918.

Yearly subscription rate, $6.00; single copies, 60 cents. Additional postage; Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year.

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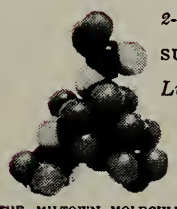
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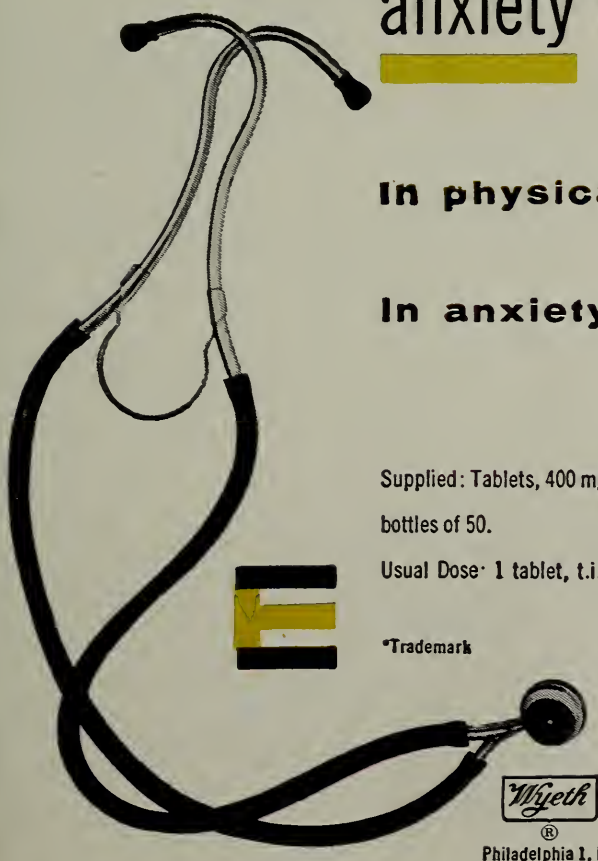
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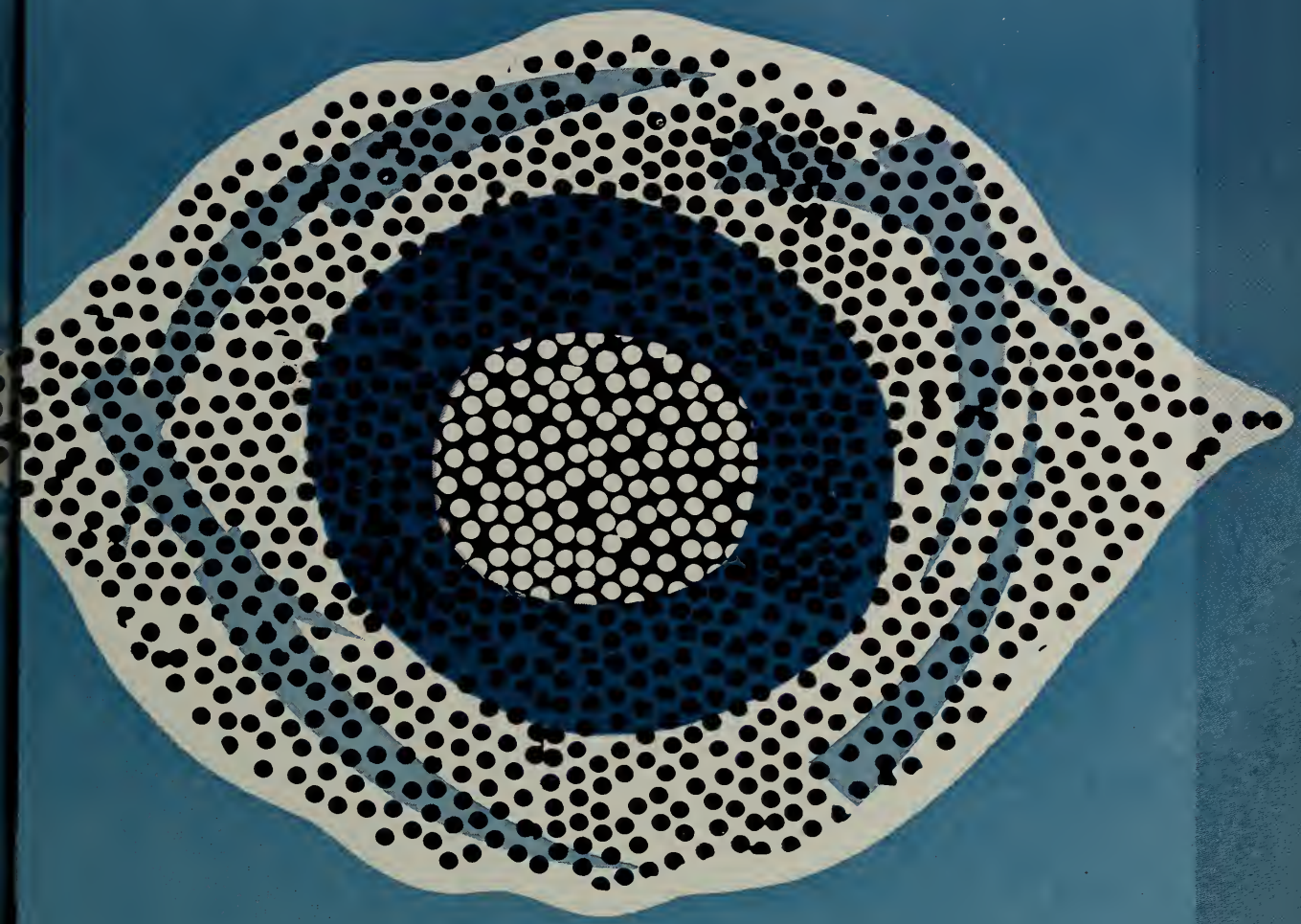
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Seated *(left to right):* W. B. Harm, M.D., Detroit; J. J. Lightbody, M.D., Detroit; Wm. A. Hyland, M.D., Grand Rapids; G. W. Slagle, M.D., Battle Creek; D. Bruce Wiley, M.D., Utica; Arch Walls, M.D., Detroit; L. Fernald Foster, M.D., Bay City; and K. H. Johnson, M.D., Lansing.

Middle row *(left to right):* B. M. Harris, M.D., Ypsilanti; G. T. McKean, M.D., Detroit; L. C. Harvie, M.D., Saginaw; Wilfrid Haughey, M.D., Battle Creek; Wm. M. LeFevre. M.D., Muskegon; Ralph W. Shook, M.D., Kalamazoo; H. B. Zemmer, M.D., Lapeer; G. B. Saltonstall, M.D., Charlevoix; and Wm. S. Jones, M.D., Menominee.

Top row *(left to right):* H. H. Hiscock, M.D., Flint; C. Allen Payne, M.D., Grand Rapids; O. B. McGillicuddy, M.D., Lansing; W. S. Stinson, M.D., Bay City; B. T. Montgomery, M.D., Sault Ste. Marie; T. P. Wickliffe, M.D., Calumet; Wm. Bromme, M.D., Detroit; and A. E. Schiller, M.D., Detroit.

HIGHLIGHTS OF THE SEPTEMBER SESSION OF THE COUNCIL

September 23 and 28, 1956

A total of eighty-seven items were presented and discussed by the twenty-five members of The Council (eighteen Councilors, the President, President-Elect, Immediate Past President, Secretary, Treasurer, Speaker and Vice Speaker) at the two meetings held coincident with the MSMS Annual Session in Detroit.

Three hundred sixteen cumulative hours were contributed on these two days by the members of The Council in their study of and decisions on the problems facing the medical profession of Michigan, including:

- **Reorganization of The Council:** D. Bruce Wiley, M.D., Utica, was re-elected as Chairman; W. B. Harm, M.D., Detroit, was again chosen as Vice Chairman; William M. LeFevre, M.D., Muskegon, was selected as Chairman of the County Societies Committee to succeed himself; G. B. Saltonstall, M.D., Charlevoix, again was given the post of Chairman of the Publication Committee; and Ralph W. Shook, M.D., Kalamazoo, was re-elected head of the Finance Committee.
- **The Monthly Financial Reports** were studied and approved as well as Bills Payable which were ordered paid.
- **Important Matters of Mutual Interest** were discussed with State Health Commissioner A. E. Heustis, M.D., including proposal to register persons using radioactive isotopes; on this subject a committee was appointed to study the Heustis document and report to the Executive Committee on October 17 (W. M. LeFevre, M.D., Muskegon, Chairman; W. B. Harm, M.D., Detroit, K. H. Johnson, M.D., Lansing, and J. E. Livesay, M.D. Flint).
- **Uniform Autopsy Code:** An invitation from the Michigan Funeral Directors Association to appoint MSMS representatives to a committee to develop such a Code was approved.
- **A. D. Allen, M.D., Bay City;** Philip T. Mulligan, M.D., Mt. Clemens, and John R. Rodger, M.D., Bellaire, were nominated as candidates for the Hill-Burton Hospital Advisory Committee, per invitation of the Governor.
- **The Invitation** of the Universiity of Michigan Department of Postgraduate Medicine for MSMS to co-sponsor a conference on "Management of Mass Casualties" was accepted.

(Continued on Page 1286)

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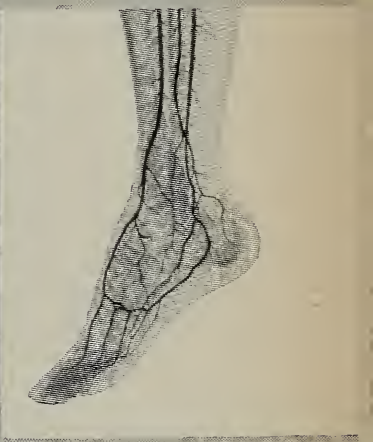
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three-way pharmacologic action by which Arlidin increases total blood flow to affected limb

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ARLIDIN HCl parenteral **5 mg.** per cc.; dosage: 0.5 cc. by slow subcutaneous or intramuscular injection; increased gradually to 1 cc. one or more times daily as required.

1 cc. ampuls, boxes of 6, 25 and 100.

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References

1. Pomeranze, J. et al.: Angiology, June 1955.
2. Freedman, L.: Angiology 6:52, Feb. 1955.
3. Hensel, H. et al.: Angiology, June 1955.
4. J.A.M.A. 159:1208, 1955.
5. Stein, I.: Ann. Int. Med., Aug. 1956.

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HIGHLIGHTS OF THE COUNCIL

(Continued from Page 1284)

- **President Walls and Secretary Foster** were authorized to attend an October 9 meeting of representatives of the National Board of Medical Examiners, the Deans of the two medical schools in Michigan, and representatives of the Michigan State Board of Registration in Medicine, to discuss medical licensure.
- **Committee Reports:** The following were given consideration: (a) Public Relations Committee, meeting of August 26; (b) Committee on Colored Television for 1957 Michigan Clinical Institute, meeting of August 22; (c) Committee on Michigan Medical Service, August 29; (d) Rheumatic Fever Control Committee, September 5; (e) Committee on Closed Panel Practice, September 5; (f) Committee to Select Legal Counsel, September 5; (g) Committee on Fee Schedules of Michigan Medical Service, September 23; (h) Medical Advisory Committee to State Department of Social Welfare, September 13.
- **The Medical Advisory Committee to Michigan Hospital Service** was reactivated composed of William S. Reveno, M.D., Detroit, Chairman; E. C. Baumgarten, M.D., Detroit; Otto O. Beck, M.D., Birmingham; William Bromme, M.D., Detroit; C. W. Colwell, M.D., Flint; W. M. LeFevere, M.D., Muskegon; J. D. Miller, M.D., Grand Rapids; R. L. Novy, M.D., Detroit; Ralph W. Shook, M.D., Kalamazoo; D. R. Smith, M.D., Iron Mountain, and L. Fernald Foster, M.D., Bay City, Secretary. This followed request of Michigan Hospital Service through its President John W. Paynter, Detroit.
- **MSMS Representatives to Michigan Cancer Coordinating Committee** (for year beginning January 1, 1957): R. C. Hildreth, M.D., Kalamazoo; W. A. Hyland, M.D., Grand Rapids; E. T. Thieme, M.D., Ann Arbor, and J. M. Wellman, M.D., Lansing, were reappointed.
- **The Supplemental Annual Report of The Council** was presented, thoroughly discussed, and approved as amended.
- **Introductions:** At the September 28 meeting of The Council the newly elected officers were introduced: President-Elect George W. Slagle, M.D., Battle Creek; Speaker K. H. Johnson, M.D., Lansing; Vice-Speaker J. J. Lightbody, M.D., Detroit; Councilors C. Allen Payne, M.D., Grand Rapids; H. J. Meier, M.D., Coldwater; also re-elected Councilors A. E. Schiller, M.D., Detroit, Ralph W. Shook, M.D., Kalamazoo, and H. H. Hiscock, M.D., Flint.
- **Medicare Program:** Jay C. Ketchum, Executive Vice President of Michigan Medical Service, (upon invitation) gave a progress report on this governmental program to supply, through private practitioners, medical care for servicemen's dependents. The Council requested Mr. Ketchum to proceed with negotiations based on the fees for certain procedures as recommended.
- **$6,000 Income Limit Contract of Michigan Medical Service.** The Council approved this contract and the schedule of fees for the $6,000 income limit as developed by the MSMS Committee on Fee Schedules for Michigan Medical Service, officially transmitted the fee schedule to Michigan Medical Service, and authorized MMS to release the fee schedule and negotiate it with all parties in interest.
- **An official thanks** to all who helped make successful the 1956 Annual Session was voted by The Council. The record registration of 4,290 was noted with gratification.
- **An indoctrination meeting** of all MSMS and and Council Committee Chairmen was decreed by The Council.
- **Presentation of a plaque** to the Michigan State Medical Society by the Medical Exhibitors Association, on September 27 in Detroit, was noted and appropriate thanks to the MEA were placed in the minutes of The Council. The Executive Director indicated that this was the first time MEA had so honored any medical society.

REPORT ON POLIOMYELITIS IMMUNIZATION IN OTTAWA COUNTY

We, in Ottawa County, believe this report is unique for two reasons:

First, for the very high percentage of immunization for poliomyelitis that has been achieved. (Up to August 30, 1956, 16,793 of 19,481 children aged one through fourteen had received two or more shots of Salk vaccine.)

Second, the fact that this has not been done through mass inoculation or public clinics, but through a co-operative effort of the Ottawa County Health Department and the Ottawa County Medical Society. (The great majority of these inoculations have been done in the private offices of the family physicians of Ottawa County.)

Let me review briefly for you the history of this program. In 1954 Ottawa County was one of the ten counties invited to participate in the field evaluation of the new Salk vaccine. Children in the first, second and third grades were chosen to participate in the program. Out of 5,618 children in this age group, 1,890 participated. Of this one-third that participated, 935 actually received two shots of the Salk vaccine, and 955 the control solution. Twenty-three children either did not complete the series or received mixed injections.

In the spring of 1955, additional vaccine was made available by the National Polio Foundation for children in the first, second and third grades and those in the fourth grade who had not received vaccine in the field trial. A program of

(Continued on Page 1290)

"clinical response good or excellent"

In one recent study, 18 patients with acute follicular tonsillitis and septic sore throat, were given erythromycin. Infecting organism was *Str. pyogenes*. The investigator stated, "*In all 18, the clinical response could be regarded as either good or excellent.*"[1]

This, of course, is only one of many reports showing the effectiveness of ERYTHROCIN against coccic infections. You'll get the same good results (nearly 100% in common, bacterial respiratory infections) when your prescription reads *Filmtab* ERYTHROCIN Stearate.

"toxicity lower in erythromycin-treated patients"

After a study of 208 patients treated with erythromycin (78), procaine penicillin (78) and a placebo (52), the investigator stated: ". . . *the incidence of toxicity* (compared to procaine penicillin) *was significantly lower in the erythromycin-treated patients.*"[1]

Actually, ERYTHROCIN stands on a remarkable record of safety. After four years, there's not a single report of a severe or fatal reaction attributable to erythromycin. Also, allergic reactions rarely occur. *Filmtab* ERYTHROCIN Stearate (100 and 250 mg.), is available in bottles of 25 and 100, at all pharmacies.

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1. Herrell, W. E., Erythromycin, Antibiotics Monographs, No. 1, p. 29, New York, Medical Encyclopedia, Inc., 1955.
Idem p. 30.

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POLIOMYELITIS IMMUNIZATION

(Continued from Page 1286)

mass inoculation in clinics was instituted when the vaccine became available, with members of the county society aiding in the administration of the vaccine. In this program, 2,358 children had two doses of vaccine, 1,286 had one, and 607 children who had received their two initial shots in 1954 received a third dose. Both the 1954 and the early 1955 programs received a great deal of newspaper publicity and although participation in 1955 improved, it still reached less than half of those children eligible for immunization.

Following the enactment of legislation in Michigan authorizing the purchase of vaccine from public funds, the Health Department and the medical society decided to try a new attack. It was agreed that the Health Department would contact all children in the age group five through nine in the limited priority groups as it was first set up, by circularizing these children at school. A simple form stated that the Salk vaccine was available for children five through nine who had not previously received it, and that it would be administered by a physician of their choice. The lower half of the form provided for a request for immunization for each individual child and a place to designate the choice of physician. A very high percentage of these forms were returned promptly, record cards were prepared by clerks in the Health Department and these cards, together with a supply of vaccine were delivered to the physician of choice.

Further requirements of the procedure adopted and approved by the County Society were that all physicians receiving vaccine should administer the vaccine for a service fee not to exceed $2.00 or where families were in poor circumstances, no charge would be made. In addition, any physician who failed to comply with the statute by reporting the name, address, age, site of injection, manufacturer and lot number of the vaccine used, would be promptly excluded from the program.

Although there were some hitches, due chiefly to the supply of vaccine's being insufficient to meet demand early in the program, things in general went very smoothly. When, early in 1956, priority groups were expanded to include youngsters aged one through fourteen and pregnant women, a simple news release reporting the facts to the public was issued by the County Health Department and physicians were notified of the change in priority groups. The high percentage of participation in the program at this time indicated that it would not be necessary to contact the parents or to urge that they have their youngsters immunized if they were not already included in the program of immunizations. Contacts were made directly through the physicians' offices and as vaccine was used and reported, the physician's supply was replenished. Up to the end of August, the Health Department had received cards indicating that 16,793 youngsters out of the 19,481 eligible had received two doses, and many, a third dose of Salk vaccine. In addition, immunization of 738 pregnant women was begun and 377 of these received two doses. This we believe establishes a high degree of immunity in 86 per cent of our most susceptible citizens.

The program currently is slowing down, not for lack of vaccine, not for lack of interest on the part of parents or physicians, but because we are running out of nonimmune youngsters. We in Ottawa County take pride in the fact that we have obtained a high degree of co-operation by parents, have established a high degree of immunity to poliomyelitis in our community and that we have accomplished this in the short space of ten months.

Let us recapituate the totals of youngsters aged one through fourteen who have received at least two doses of vaccine:

1954	935
1955	2,358
1956	13,500
Total	16,793
(19,481 eligible)	

O. Vander Velde, M.D.
Chairman

PUBLIC RELATIONS—HERE TO STAY?

Organized public relations, fairly new to the medical scene, got a vote of confidence from physicians recently. A nationwide survey of physicians, commissioned by AMA, reveals that nine out of ten doctors believe public relations should be an important or very important function of AMA.

PR programs, according to the doctors interviewed, make for better understanding, establish AMA and its societies as the voice of the medical profession, and bring public and doctors together. Their influence in defeating government medicine is also acknowledged.

The two per cent who say they think public relations should be left to the individual doctor is balanced by a similar percentage who say doctors cannot do a good public relations job acting as individuals.

The acceptance of the public relations concept is also shown in doctors' replies to other survey questions. Public relations and informational activities were rated as the major Association aim for the public (44 per cent) and public relations was third on the list of aims of AMA for doctors (19 per cent).

Three out of five doctors (57 per cent) are aware of recent changes in AMA's public relations program and almost all of those who know of changes say they think they are good. Less than a third of the doctors say they haven't noticed

(Continued on Page 1296)



Edrisal* in Dysmenorrhea

A "satisfactory antispasmodic for use in spastic dysmenorrhea is . . . Benzedrine* Sulfate"[1]—one of Edrisal's 3 ingredients. Edrisal's other ingredients are aspirin and phenacetin.

'Edrisal' Analgesic—Antispasmodic—Antidepressant

Two tablets every 3 hours

Smith, Kline & French Laboratories, Philadelphia

Formula: Each 'Edrisal' tablet contains:

Benzedrine* Sulfate (racemic amphetamine sulfate, S.K.F.)	2.5 mg.
Aspirin	2.5 gr.
Phenacetin	2.5 gr.

1. Medical Gynecology, ed. 2, Philadelphia, 1950

*T.M. Reg. U.S. Pat. Off.

PUBLIC RELATIONS—HERE TO STAY?

(Continued from Page 1290)

any changes. A smaller percentage (46 per cent) say they also have noted public relations program changes in their state associations, but a higher proportion (40 per cent) say they are not aware of such changes at the state level.

Doctors in the South and East are less aware of PR program changes at the national level than doctors in Central and Western parts of U.S. Doctors in the East are even less aware of revamped PR programs in their state associations than they are of changes in the national program. However, the reverse is true in the South where more doctors say they have seen changes in their state program than say they have noticed them on a national level.

What changes have physicians noticed? On both national and state levels they say they are aware of a greater volume of PR activity and a stepped-up pace in these efforts. Some say there is a changed philosophy and that those concerned with public relations seem to be more alert and trying harder to do a good job. They cite TV and radio programs, articles and publications, and a better press as specific indications of improved PR. A better public reaction to the profession is also noted.

Interestingly enough, doctors are not satisfied with PR achievements. People who know AMA rate its public relations success higher than doctors do. Over half of the public (56 per cent) thinks AMA is doing a good or very good job of getting along with the public, but only 42 per cent of the doctors agree. Only one in five people say the Association is not doing a good enough PR job, but about half (48 per cent) of the doctors are not completely satisfied with progress.

About one doctor in four who feels AMA is not getting along as well with the public as it could mentions that there is too much ill-feeling toward the Association. Others mention hearsay and reputation, unfavorable publicity, and lack of awerness of AMA on the part of the public as reasons for working to improve PR. A number of doctors acknowledge that *any* program can always be improved—that you can always do a better job if you keep trying.

AMA's public relations efforts within the profession are given a higher rating. Three doctors in every five say its relations with doctors are good or very good. Only about one in three feels more can be done to improve this relationship.

When questioned about specific PR media, doctors rated television shows as more effective than radio programs or pamphlets. Two-thirds of the doctors consider "March of Medicine" and "Medic" to be very effective public relations devices. Less than 10 per cent say these shows are not very effective. AMA health educational radio programs were considered effective or very effective by 49 per cent of the physicians surveyed.

Half of the doctors say AMA-produced pamphlets for patients are very effective or effective, but one doctor out of five says these publications are not very effective in improving public relations. However, two out of three say they have placed these pamphlets in their reception rooms.

When asked to appraise the net effect of all the newspaper and magazine articles published about the profession, three out of ten physicians say such articles have generally had a good effect and one out of four say the net effect has been bad. Two out of five say the effect has been about even.

The go-ahead signal for continued public relations efforts was also given in survey results. When doctors were asked to suggest AMA programs and program changes, improved public relations and public information received the second greatest number of mentions.

Today's physicians evidently are well aware that public relations is no stop-gap device to secure specific ends—but a long-range public service and educational-type program to build a foundation of understanding and good will.—AMA *News Notes.*

BLUE SHIELD AND THE ECONOMICS OF MEDICINE

Why should any doctor take a special interest in his Blue Shield Plan?

For one thing, the physician has a vital professional stake in the success of his own medical prepayment Plan. This Plan demonstrates the doctor's determination to solve the basic problems of medical economics on terms that will assure him a continuing opportunity to give his patients the best care he is capable of rendering.

Second, the Blue Shield Plan is accounting for an ever larger part of the doctor's income. He will want to make sure that Blue Shield provides him with reasonable payments for the services that Blue Shield promises to pay for.

Third—and perhaps most important—only through Blue Shield can the medical profession continue to control the economy of medical practice.

Blue Shield pioneered the development of prepaid medical care. And, while many other agencies are now providing cash benefits for medical services on an expanding scale, only Blue Shield—because of its intimate relationship to organized medicine—is consistently endeavoring to relate its benefits to the physician's normal charges. Only Blue Shield—because of its nonprofit organization—has as its basic purpose the provision of maximum service to the patient, with an adequate compensation to the doctor. Any profit derived from Blue Shield operations goes to the patient

(Continued on Page 1298)

Journal Report:

Hypertensive symptoms relieved in 96% of patients

"Comparison of pentolinium [ANSOLYSEN] with other preparations in 25 patients with severe essential hypertension, for whom all other methods of management had failed, showed that pentolinium is the most effective of available agents in reducing dangerously high blood pressure to the desired levels, and in modifying some of the complications of hypertension, as cardiac decompensation, cardiomegaly and retinopathy. . . .

"In 96 per cent (24 patients) clinical symptoms were relieved and the blood pressure maintained at comfortable levels. . . ."[1]

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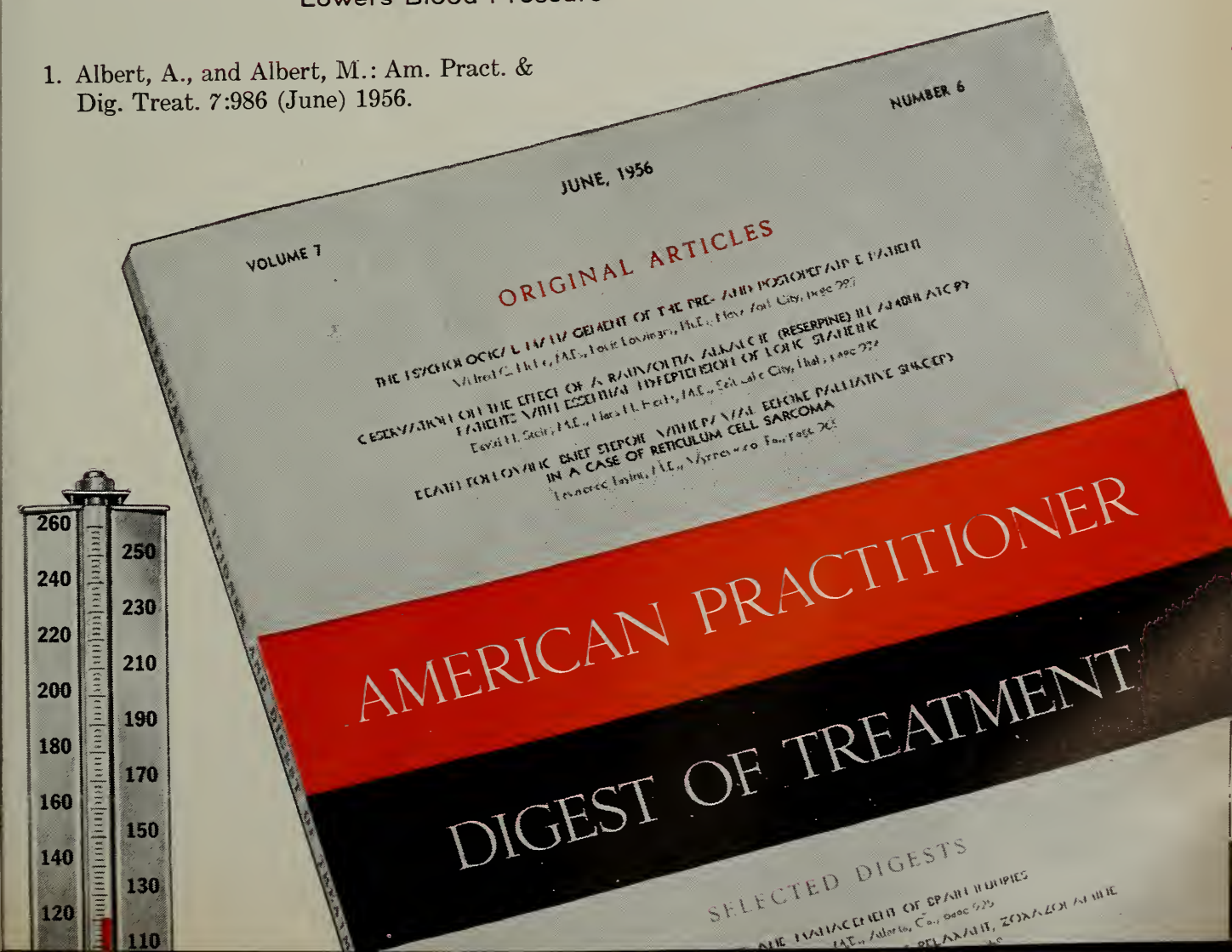
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Philadelphia 1, Pa.

1. Albert, A., and Albert, M.: Am. Pract. & Dig. Treat. 7:986 (June) 1956.



BLUE SHIELD AND THE ECONOMICS OF MEDICINE

(Continued from Page 1296)

in broader benefits, or to the physician in more adequate payment—not to a third party.

If other organizations unrelated to the medical profession were to take over the entire voluntary prepayment program, then control of the basic economy of American medicine would pass completely out of the hands of the medical profession.

Blue Shield has grown into a big business, in terms of the 37 million people enrolled and the more than $350 millions now paid each year in medical benefits by the Plans. But Blue Shield is big only because the medical profession has fashioned a big instrument to do a big job—and the public has given Blue Shield a big reception!

Blue Shield can never be bigger than the profession that created it. It is yours, doctor, to mould and shape as you will, for the greater good of the people you serve.

LESTER TAYLOR MEMORIAL SCHOLARSHIP

A $500 scholarship, named for the Cleveland Health Museum's first president, has been made available by the Women's Committee of the Museum to any qualified graduate student interested in: (1) school health education, (2) visual methods in health education, or (3) educational work in museums.

Special projects, tailored to the interests and requirements of the candidate, are set up for completion in from one to three months.

All projects must be completed on the Museum premises under the direction and supervision of its professional staff, and a written report of the project(s) is required.

A tuition fee of $100 will be paid to the Museum from the $500 stipend. The remainder is paid directly to the candidate for living and other expenses.

Address all requests for applications to Bruno Gebhard, M.D., Director, Cleveland Health Museum, 8911 Euclid, Cleveland 6, Ohio.

TO MRS. J. JOSEPH HERBERT

To the men who best knew J. Joseph Herbert, no accolade of praise seems too high.

We of The Council who worked by his side, knew his laughter, sought his advice, reveled in his friendship. We miss him.

He was unique in his devotion to Medicine to which he gave wisest counsel and full measure from his vast store of legal and temporal wisdom.

His counsel was always offered with a sageness and a sincerity that grew out of his breadth of knowledge of the humanities and of humans, and reflected the fine character of a truly great man.

Each passing day reveals new facets of his accomplishments. Every action taken by those he served recalls his value and cites his need.
His passing is a tremendous loss to Medicine. We join with you in honoring his memory.

THE COUNCIL OF THE MICHIGAN STATE MEDICAL SOCIETY

Plaque Inscribed with Signatures of All Members of The Council and forwarded to Mrs. Herbert on September 28, 1956

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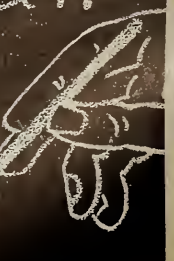
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New improved formula - now the best tasting. Used like table salt.

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PR REPORT

"NAME A COMMUNITY IN MICHIGAN without the services of an M.D. and win yourself a silver dollar!" "Guess the number of M.D.'s now practicing in Michigan and win a $100 savings bond!"

These were the cries that greeted fair-goers at the MSMS exhibit booth during the Michigan State Fair in Detroit this year. Using a contest theme the exhibit sought to point up the M.D. Placement Program which is jointly promoted by the Michigan Health Council and the Rural Medical Service Committee of MSMS under the direction of Mr. Jack Kantner.

If a contestant guessed the name of one of the 106 towns in Michigan, with a population of 500 but without the services of an M.D. (and no one had previously selected it), he was ceremoniously awarded a silver dollar and the town's location was indicated on a large mounted state map with a red pin.

He was also urged to compete for the $100 bond by writing on an entry blank his estimate of the number of M.D.'s now practicing in Michigan. These guesses ranged from a few hundred to 360,000, most of which ran considerably higher than the correct figure of 8,214. Mr. Elwyn I. Evans of Clawson was nearest with 8,206.

The Woman's Auxiliary gave its usual splendid co-operation during the ten days. In addition to offering subscriptions of Today's Health for half price they helped the P.R. staff with the contests when the crowds threatened to overwhelm the booth.

THE AMA-PR INSTITUTE convened in Chicago, August 28-30. John R. Rodger, M.D., Chairman of The Council Committee to Study Prevention of Highway Accidents, and Hugh W. Brenneman, MSMS P.R. Counsel, participated as instructors in the "What's Cooking in P.R.?" seminar. R. Wallace Teed, M.D., Vice-Chairman of the MSMS Public Relations Committee, William J. Burns, Executive Director of MSMS, Field Secretaries Warren Tryloff and Dick Philleo and Miss Else Kolhede, Wayne County Medical Society Executive Secretary also attended the three-day meet which brought together national experts with the newest in P.R. techniques and public relations personnel from most of the medical societies in the U.S. and Canada.

THE "GET-OUT-YOUR-VOTE" campaign at this writing is in its final five weeks. "Register-Vote" mailing pieces were sent to all members of MSMS with a return postcard for ordering of additional copies. These nonpartisan pamphlets listed the important dates for registering, obtaining absent-voters ballots and voting. All M.D.'s were urged to give them to their patients, friends and medical assistants. To date 15,000 copies have been distributed.

THE WAYNE COUNTY MEDICAL SOCIETY is sponsoring a series of fourteen Friday night television programs entitled "For Doctors Only" on Detroit's educational-TV station WTVS. Each production is composed of two half-hour segments, the first of which is given over to a discussion of the evening's topic in scientific terms by a panel of experts. An announcement is then made that the doctors will return to the TV screen after thirty minutes to answer (in lay language) pertinent questions phoned in to the studio by viewers.

The scientific material was developed by the Medical Education Committee of WCMS with the close co-operation of the Wayne University College of Medicine.

Subjects covered in the September and October programs included: "Exfoliative Cytology in the Diagnosis of Cancer of the Cervix," "The Diagnosis and Treatment of Rheumatoid Arthritis," "Medical and Surgical Problems in Liver Disease," "Injuries of the Hand," The Diagnosis and Treatment of Osteoarthritis," "The Recognition and Therapy of the Anemias" and "New Thoughts in the Care of Skin Blemishes."

The program schedule for November and December is printed below.

Date	*Subject*	*Panel Chairman*
Nov. 2	The Management of the Cerebrovascular Accident	John Webster, M.D.
Nov. 9	The Differential Diagnosis of Lymphadenopathy	George Clifford, M.D.
Nov. 16	Insulin Therapy in Diabetes	George Thosteson, M.D.
Nov. 23	The Use of Oxygen in Modern Medicine	F. E. Greifenstein, M.D.
Nov. 30	Acute Leukemia, Its Diagnosis and Treatment	Wolf Zuelzer, M.D.
Dec. 7	The Management of Intestinal Obstruction	Charles Johnston, M.D.
Dec. 14	Care of the Infant During the Neonatal Period	Edgar Martmer, M.D.

TWO INNOVATIONS were incorporated this year for the first time in the Annual MSMS Press Dinner, the traditional meeting with important radio, TV and press figures preceding the An-

(Continued on Page 1403)

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(Ascorbic Acid present as 60 mg. Sodium Ascorbate.)

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Heart Beats

HOWARD SPRAGUE, M.D., TO SPEAK AT MHA ANNUAL MEETING



Howard Sprague, M.D., internationally known cardiologist and a Past President of the American Heart Association, will be the featured guest speaker at the annual meeting of members of the Michigan Heart Association on Thursday evening, March 14, 1957, according to an announcement by Earle A. Irvin, M.D., Dearborn, President of the Michigan Heart Association. The MHA Annual Meeting will be held in conjunction with the Michigan Clinical Institute.

"How to Tell Women" is the interesting and thought-provoking title selected by Dr. Sprague for the talk which he plans to present at the dinner meeting scheduled for the Grand Ballroom of the Sheraton-Cadillac Hotel in Detroit. The dinner meeting is a slight departure from the usual annual meeting format, and everyone is cordially invited to attend, whether or not he is a member of the Heart Association. Dr. Sprague will also moderate a panel on "The Heart Patient at Work" during the scientific program on Thursday morning.

Dr. Sprague has been connected with the Cardiac Clinic and Laboratory of the Massachusetts General Hospital since 1924. He has held appointments on the staff of the hospital throughout this period and is now a member of the Board of Consultation to the hospital.

On the Faculty of Medicine at Harvard, he is Lecturer on Medicine. Shortly after the founding of the American Heart Association in 1924, he became interested in its work and has remained continuously active in the councils, serving ten years as Secretary, and in 1950-1951, as President of the Association. For seven years, he was President of the New England Heart Association, four of these terms, however, were in abstentia while on active duty in the Navy in World War II. He spent sixteen months in the South Pacific as Chief of Medicine of a mobile hospital in New Zealand and of the hospital ship Solace. He was promoted to Captain in 1943.

Among his interests in the various aspects of cardiology, he has maintained a special concern about auscultation and phonocardiography and in 1926 invented the Sprague-Bowles combined stethoscope now widely used by cardiologists throughout the United States.

MHA ESTABLISHES REGIONAL OFFICES

The Michigan Heart Association has established Regional Offices in Traverse City, Grand Rapids, Flint, and Detroit, the better to serve the medical profession and the public throughout the State. The Michigan State Medical Society has reviewed the plan of the Michigan Heart Association and will be working closely with it by providing medical guidance and direction.

According to E. A. Irvin, M.D., MHA President:

> The establishment of Regional Offices by the Michigan Heart Association "is a sincere effort by the Association to bring more services, primarily educational, to the people of the State from which financial support for its programs is derived. . . . It is necessary that all people who are liable to the impact of heart disease should be informed on, concerned with and enlisted in the fight against it. To this end the Michigan Heart Association plans to organize 'Heart Units' in every area of Michigan which will be manned by local volunteers who will carry out the Association's programs, projects and activities."

Regional Directors for each office, their addresses and telephone numbers are:

Mr. Walter Haberaecker, Regional Director, Michigan Heart Association, The T.C. Professional Building, 223 Grandview Parkway, Traverse City, Michigan. Traverse City: 3-111.

Mr. Ned Stuits, Regional Director, Michigan Heart Association, 100 Michigan, N.E., Grand Rapids 3, Michigan. GLendale 6-9923.

Mr. Ronald Eick, Regional Director, Michigan Heart Association, 217 East Court Street, Flint 3, Michigan. CEdar 3-8605.

Mr. Lee Hames, Regional Director, Michigan Heart Association, Doctors' Building, 3919 John R, Detroit 1, Michigan. TEmple 1-8550.

The Association, which maintains headquarters in Detroit, receives financial support for its activities through "Memorial Contributions" and from United Fund Raising Campaigns in many Michigan communities. Memorial Contributions received by the Association in memory of departed loved ones are used exclusively for heart research.

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Say you saw it in the Journal of the Michigan State Medical Society

Doctors' Investment Woes

A prosecutor's detective who has handled hundreds of fraud cases was talking recently about doctors and investments. Through experience he'd found that the keen analytical mind of the examining room doesn't necessarily carry over into financial matters. What he really said was this:

"Doctors are suckers. They run to a high percentage of prime prospects for con men. Why?

"Doctors' names and addresses are easy to come by. They're in top income brackets. They're intelligent enough to want to provide for their families' future. And they don't know anything about investment.

"What's more, if a doctor gets stung he isn't likely to make a fuss and get himself in the newspapers, for obvious reasons. What could be better for the con man?"

Attorney General's Findings

New York Attorney General Jacob K. Javits puts it more tactfully and more constructively: "It has been my experience and the experience of my staff investigating securities frauds that a great many physicians are victimized by the schemes of swindlers and con men in the securities field."

"Of course," says Mr. Javits, "no individual is immune from the pitfalls of fraudulent stock sellers. Doctors, as any other investors, must learn to investigate before investing. They must be impressed with the importance of dealing with reliable firms and individuals."

But the average physician is a busy man. He may have the income to invest, but medical schools don't offer courses in stocks and bonds. How is he to recognize a reliable broker?

Many reliable investment firms and individual brokers have branch offices throughout the country. And even the biggest and most reliable are willing to meet the busiest doctor half way.

Holdings Analyzed Free

For example, one of the leading investment houses in New York recently staffed a booth at a state medical association's annual meeting in the Midwest.

Of the 1,000 physicians who attended, some 300 visited the investment firm's booth and were invited to submit reports on their investment holdings for analysis without charge. About 75 accepted the invitation.

Case-hardened investment counselors blinked their eyes in astonishment at the results. "A number of the doctors' portfolios," said one, "reinforced a widely held theory that the streets of Canada are paved with uranium. We couldn't find a market record of many of the issues they had purchased some years before."

One internist came in with $6,000 worth of convertible telephone debentures. They were in the form of a temporary certificate on which the coupons had never been collected. Investigation showed the convertible debenture had been called in several years ago. The doctor's loss was $2,400 in the current market.

Case of the Missing Shares

Another specialist's records showed he had bought 50 shares of A. T. & T. four years ago but they'd never been delivered to him. And he'd never received a single dividend check.

What really happened, it turned out, was this: The doctor had purchased the shares as a Christmas gift for his wife. To make sure he'd have the present in time, he had asked for rush delivery of a certificate made out in street name only. The broker had obliged, but with a warning that the certificate must be registered in the wife's name after the holidays.

In the yuletide rush it was forgotten. It turned up recently in the doctor's safe deposit box, still unregistered. This lapse cost the doctor the use of $7,500 for four years.

A Common Problem

These are true case histories. But are they really typical? They are to this extent, says an investment counselor who had handled doctors' financial affairs for many years: "As a group, doctors tend to invest in a haphazard manner with little regard for their ultimate objectives.

"The typical doctor tends to plan wisely from the standpoint of a good life insurance program, and often a good annunity program, but then he's likely to scatter sums on speculative issues, many in the penny class, or to tie up sizable amounts in conservative mutual funds."

Well, what is a good investment program? "One that is custom-tailored to the individual investor's needs to meet a clearly defined objective. For instance," adds the investment counselor, "an older physician with a larger income might require blue-chip securities with a steady yield. A younger man with a longer earning expectancy and lesser responsibilities might be better off with growth stocks that have a deferred pay off."

The counselor echoes the advice of Attorney General Javits: "Reliability in an investment firm is vital, and membership in the New York Stock Exchange is a good index to reliability."—Iatros in *Medical News,* September, 1956.



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Medicare

Facts and plans for medical care of dependents of servicemen have been outlined to our readers as they become available. Every doctor who by chance may have some of these dependents as patients, should know the whole story. The following is quoted from the AMA Secretary's Letter of October 15, 1956. As soon as final plans and contracts are available, the information will be published, possibly in the December number of THE JOURNAL.

The ground rules, some definite and some indefinite, for operation of the new law authorizing civilian medical care at government expense for more than 800,000 wives and children of servicemen, are the biggest talked-about news on the medical front today.

Because of the law's importance and the many problems it poses for the medical profession, this Secretary's Letter is devoted entirely to a factual account of the historical background, the status of regulations now being promulgated in Washington to implement the Act, and other items of general interest to physicians.

In 1953, the Moulton Commission reported its findings and recommendations with respect to dependent medical care. The AMA opposed the Commissioner's major recommendations, as well as the subsequent bills which were introduced to implement them.

In December, 1954, the AMA House of Delegates voted that "if it is to be the policy of the government to provide for medical care for dependents of service personnel, the services of civilian physicians and hospitals be used whenever possible, to be paid for at prevailing rates with provision for free choice of physicians."

In 1955, Congress shifted its position and developed legislation emphasizing utilization of civilian resources.

Two Testify.—On January 25, 1956, Dr. Edwin S. Hamilton, Kankakee, Ill., an AMA trustee, and Dr. Woodruff L. Crawford, Rockford, Ill., testified on behalf of the American Medical Association before a subcommittee of the Committee on Armed Services of the House of Representatives in Washington.

Dr. Hamilton urged that if Congress saw fit to provide additional medical care to dependents "increased emphasis should be placed on the utilization of civilian facilities and the services of civilian physicians."

He pointed out also that such a program would reduce the requirements of the armed forces for physicians and obviate the necessity for any further extension of the Doctor Draft Law.

Dr. Crawford discussed many details of the bill and, in general, argued for greater emphasis on civilian resources and less on military facilities. Many of the recommendations he made later became part of the law.

Before the bill was enacted, a restriction was written in at the request of the uniformed services. It provided that the right to private medical care for dependents residing in areas where the member concerned is assigned and where adequate medical facilities for the uniformed services are available may be limited by the Secretary of Defense.

After the bill became law, the AMA House of Delegates on June 11, 1956, adopted a resolution urging all medical associations to co-operate with the Defense Department "in the provision of medical services to the dependents of servicemen . . . utilizing such insurance, medical service, or health plan or plans as encompassed by the law. A plan or program for any given geographical area should first be approved by the organized medical profession of that area . . ."

At the same time, the House also directed the Board of Trustees "to initiate direct liaison with the Department of Defense and render all reasonable and effective aid and assistance to state and county medical societies toward implementation of the Act."

The Board of Trustees thereupon appointed a special Task Force on Dependent Medical Care, with Dr. Hamilton as chairman. Later Dr. Hussey was named chairman of a special committee of the Task Force.

Series of Conferences Begin.—A series of conferences by Dr. Hussey's committee and the special Task Force of the Defense Department began at the time of the fourth draft of the joint directive to implement the program. Chairman J. V. Noel, Jr., of the Navy, and his group cordially received the detailed recommendations of the Hussey committee. On many issues the two groups were able to reach complete agreement, although some of the suggestions of the Hussey committee were rejected.

Two-Day Meeting of Medical Society Representatives.—On July 28-29, a meeting of representatives of constituent medical associations was called by the AMA at which time the medicare program was discussed. At this meeting, held in Chicago, representatives from the Department of Defense outlined their plans and answered many questions.

The Conference recommended that the constituent medical associations determine immediately if they:

1. Were ready to co-operate with the Department of Defense in promoting the program;

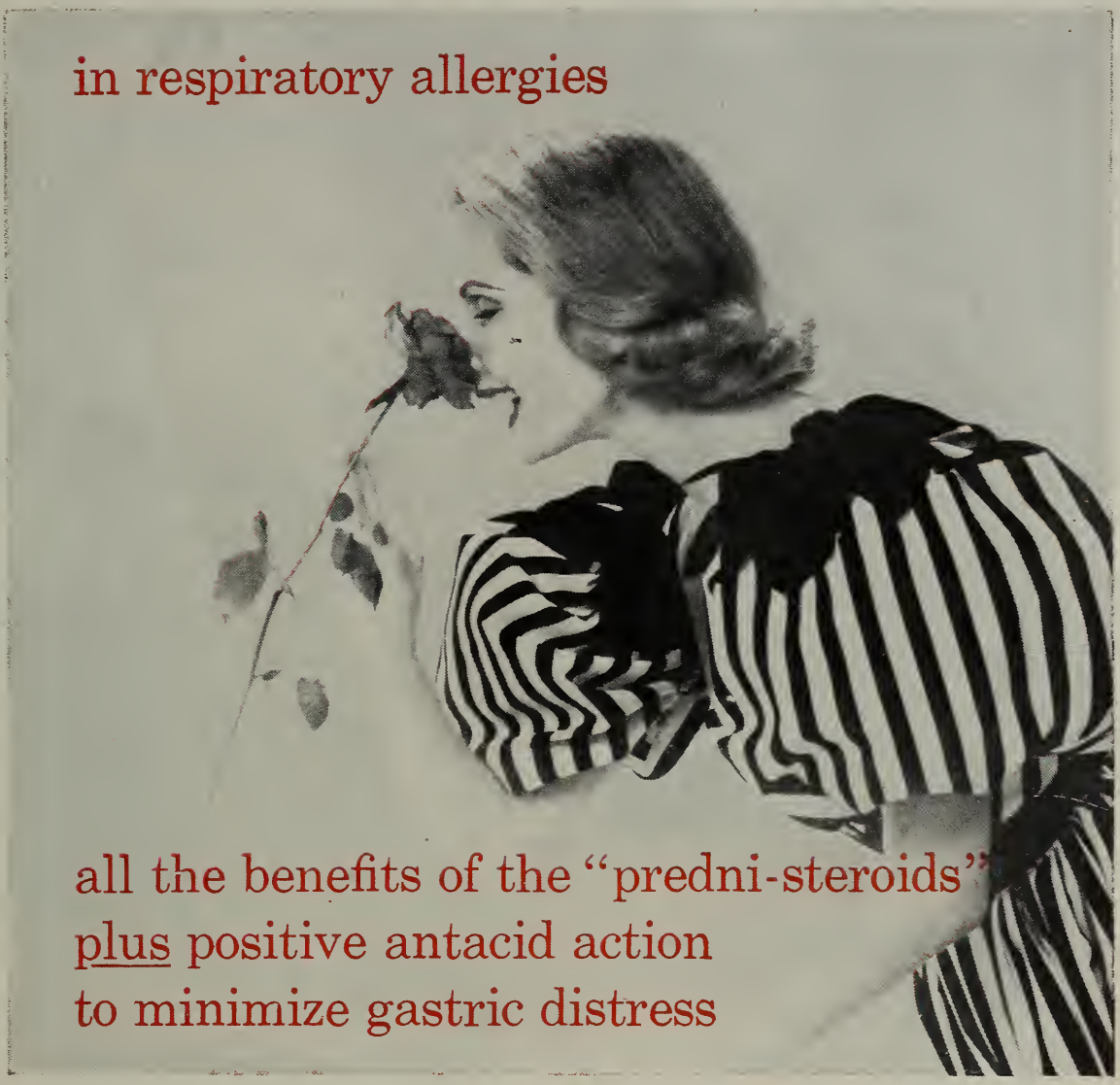
2. Would prepare a schedule of allowances for the reimbursement of physicians for medical services, on a state or area basis;

3. Would indicate preferences for the contracting agent and fiscal administrator.

The appropriate policy-making bodies of forty-six constituent associations have selected to date as contracting agency: the constituent medical association in thirty-four instances, a Blue Shield plan in seven, and no clear indication of preference in five instances.

(Continued on Page 1310)

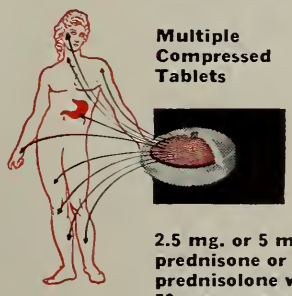
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Clinical evidence[1,2,3] indicates that to augment the therapeutic advantages of prednisone and prednisolone, antacids should be *routinely* co-administered to minimize gastric distress.

References: 1. Boland, E. W., *J.A.M.A.* 160:613 (February 25) 1956. 2. Margolis, H. M. *et al.*, *J.A.M.A.* 158:454 (June 11) 1955. 3. Bollet, A. J. *et al.*, *J.A.M.A.* 158:459 (June 11) 1955.

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*Griffith, G. C.; Dimitroff, S. P., and Thorner, M. C.: Ann. Int. Med. 45:7, 1956.

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(Continued from Page 1308)

To date, the fiscal administrator preferences are: Blue Shield plans in thirty-one instances, the constituent medical association in fourteen and an insurance company in one state.

All of these recommedations have been transmitted to the Department of Defense, whose executive agent is the Army. The Army, in turn, will determine in each case if the fiscal administrator named has the resources with which to conduct the program.

Final Draft of Directive Nearly Ready.—The final version of the directive to be promulgated jointly by the Departments of Defense and Health, Education and Welfare is nearly complete and should be available for distribution shortly.

Several meetings have been held by AMA and state society representatives and the uniformed services to consider the nature of the contract between the government and the contracting agent and fiscal administrator. These contract conferences are continuing.

It is anticipated that the government will be ready in about two weeks to begin specific negotiations with the medical societies. It has been the policy of the representatives throughout these conferences to protect the right of constituent associations to negotiate on behalf of their physician members.

During the contract phases of the various meetings, representatives of Blue Shield have been invited to sit in. On October 10, a joint meeting of the technical committees of the AMA and Blue Shield was held to review the current status of the program.

Contract Signing Near.—In summary. the Defense Department and its executive agent, Department of the Army, are fast approaching the point when they will begin to sign contracts and finalize the initial phase of the medicare program. There are going to be many problems. . . . challenging problems now and in the future. This gigantic program is new to the Department of Defense, just as it is to the constituent medical associations.

As Dr. Hamilton said in his remarks to the congressional committee:

"Time will be required to iron out unforseen details."

Sincerely yours,

Ernest B. Howard, M.D.
Assistant Secretary

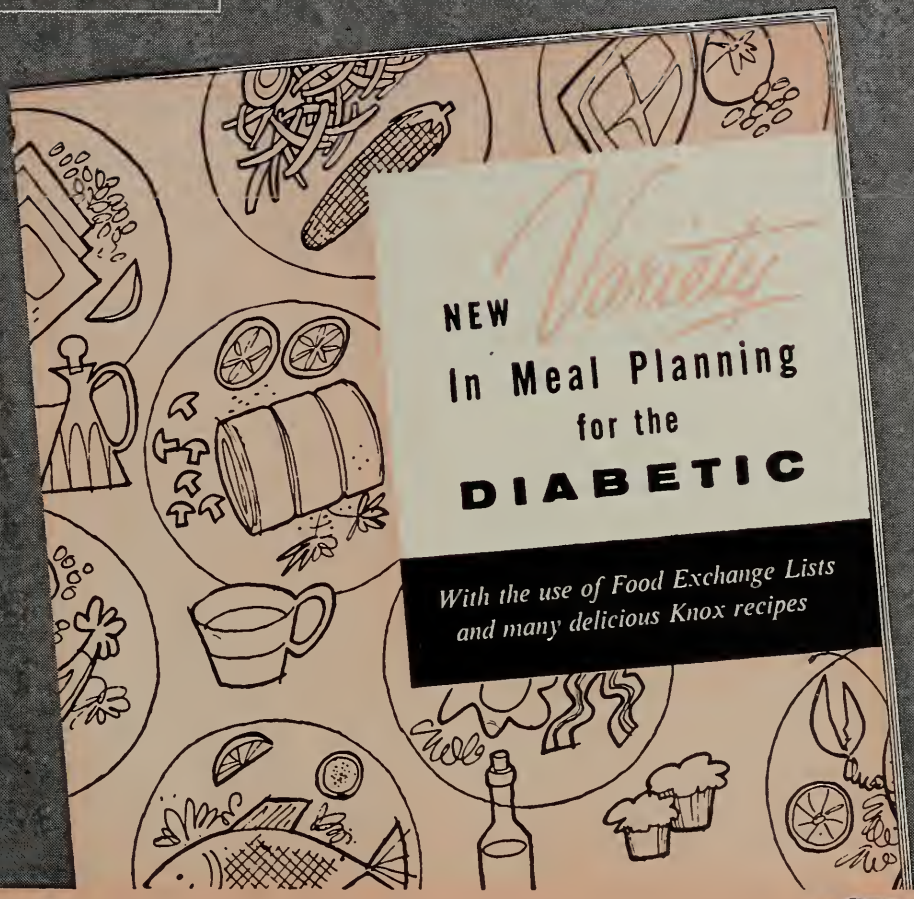
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AMA Washington Letter

THE MONTH IN WASHINGTON

In addition to helping states make monthly public assistance payments to certain indigent persons, the federal government for a number of years also has contributed to the cost of their medical care. Because the grants formula is somewhat complicated, and the amount of medical care varies with the states, this U.S. contribution cannot be fixed definitely. It is estimated at about 90 million dollars a year.

About a third of the states now deposit these federal grants—which must be matched 50-50—in a separate fund, from which the medical care costs are paid directly to the vendors, such as physicians, dentists, hospitals, nursing homes and druggists. The remaining two-thirds include medical care costs in monthly checks to the indigent, and expect these people to pay their own medical bills.

But beginning next July 1, this U.S.-state medical care arrangement is going to be drastically altered. For one thing, the U.S. will increase its payments from the current $90 million a year to between $200 million and $300 million. For another, *all* medical care money under the new program will be put into a separate fund, from which the indigents' medical bills will be paid, in one way or another, by the state itself.

It is true that in some states the new program will not have much effect. This will be the case with those states that already have a substantial medical care program and see no reason for increasing it and with those unable to raise the matching money.

But the amount of money potentially available to each state is significant, and in most states the change-over from the old to the new systems will have an important effect on physicians and other vendors of medical care. For example, eight states will have "new" medical care funds in excess of 10 million dollars, if they put up half the money. California's potential fund is $27 million and New York's and Texas' more than $18 million each.

Before state welfare directors can start operating under the new program, they will have to decide (a) whether they will require doctors to agree to a fee schedule, if one is not already in operation in their indigent care program, and (b) how the doctors will be reimbursed (whether through their societies or other mechanisms, or directly by the government). Some state welfare officials already have approached state medical societies to talk over the situation.

(U.S. contributes to indigents in only four categories—the aged, dependent children, the blind and the disabled. For their medical care, it will offer states $3 per month for each adult and $1.50 for each child, money which the state must match. It is out of these funds that payments will be made for medical care.)

NOTES: Because most applicants did not supply enough information, the council in charge of grants for medical research facilities approved only a handful of projects at its first meeting. Although $30 million was available, only $764,159 was allocated. Money went to seven institutions. However, the expectation is that the fund will be just about exhausted at the December meeting of the council, as more than 250 hospitals, schools and laboratories have asked for money.

First head of the new National Library of Medicine is the man who steered the Armed Forces Medical Library through the last seven troubled years—Col. Frank B. Rogers. He is on loan to PHS, which is in charge of the new institution to be built up around AFML.

Hearings will be held probably in December by the House Interstate and Foreign Commerce committee on federal aid to medical education. The expert panel system will be used, instead of lone witnesses. Currently the committee staff is analyzing information received in response to questionnaires sent out to about sixty organizations interested in medical education.

A six-man advisory committee, named by Secretary Folsom, is attempting to work up suggestions that will help hospitals improve care and reduce costs. Some possibilities: central cafeterias for ambulatory patients, light housekeeping work done by some patients themselves.

Regional Small Business Administration offices now are taking applications for loans to three types of health facilities—hospitals, nursing homes, and medical and dental laboratories. Institutions must be "small" and must be run for private profit.

Mortality from radical neck dissection for carcinoma of the tongue and floor of the mouth is extremely low, considering the extensiveness of the surgical procedure.

* * *

Health surveys are gestures only unless adequate follow-up is an integral part of the survey program.

* * *

Weight loss and anemia, especially in middle-aged persons, are symptoms suggestive of gastric malignancy.

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

VOLUME 55 NOVEMBER, 1956 NUMBER 11

Medicine's Public Service

The objectives of the Michigan State Medical Society are to promote the science and art of medicine and to protect the public health.

This Society is the professional voluntary statewide organization of doctors of medicine in Michigan. It is composed of over 4,800 doctors of medicine with fifty-five component county and district medical societies representing the eighty-three counties of Michigan. The Society, in turn, is a constituent member of the American Medical Association.

The policy of the Michigan State Medical Society is decided by the House of Delegates meeting in annual session. The Council (board of directors) of the Society, meeting three times yearly, conducts the affairs of the organization, and the Executive Committee of The Council, meeting nine times per annum, carries on the interim business of the Society.

The entire program of the Michigan State Medical Society can be broken into the following categories, with each serving a particular element of the overall health and medical care picture:

1. Disease Prevention and Control
2. Scientific Medical Research
3. Co-operation with Health Professions
4. Co-ordination with Government Agencies
5. Education within the Profession
6. Information to the Public
7. Economics of Health
8. Ever Wider Distribution of Medical Care

The articles following give indication of some of the service programs currently being carried out under the aegis of the Michigan State Medical Society.

In Recognition of Public Service

By L. Fernald Foster, M.D.



In 1947 the Michigan State Medical Society, desiring to acknowledge publicly the extraordinary work of many lay individuals and organizations who are constantly promoting better health for the citizens of Michigan, established a new committee of The Council—the Committee on Awards.

This three-man body was charged with the responsibility of recommending to The Council, annually, lay persons or groups who are deserving of public recognition for their achievements in the health field.

Every year for the past three years one newspaper reporter has been recognized for his (or her) outstanding work in writing and reporting on medical science. In addition to this "Outstanding Science Writer" award presented to the reporter, a companion citation for "Excellence In Medical Reporting" is conferred upon his parent newspaper.

By presentation of a "Distinguished Health Service" award attention is also focused on other outstanding work accomplished in the health field by firms, individuals and foundations. Recipients of this honor might be a pharmaceutical house, a

L. Fernald Foster, M.D., Bay City, is Chairman of the Committee on Awards; Secretary of MSMS; President of Michigan Medical Service; and Past President of MSMS.

research group, a radio or TV station or sponsor, or any other entity promoting better health for Michigan citizens.

In addition to these awards for laymen, the Michigan State Medical Society annually recognizes the election of Michigan's Foremost Family Physician, the members of MSMS receiving their Fifty-Year Awards, Honorary Members of MSMS, and the Biddle Lecturer and the Beaumont Lecturer, the last two in appreciation for lectures by outstanding citizens at annual meetings of the State Society.

The Editor of THE JOURNAL, Wilfrid Haughey, M.D., the President Emeritus of Michigan Medical Service, R. L. Novy, M.D., and the Secretary of MSMS, L. F. Foster, M.D., were each elected President-for-a-Day of the MSMS in 1949, 1952 and 1954, respectively, in recognition of their service to the medical profession.

Attention is also focused on doctors who attain the presidency of their own national medical-specialty societies. Each year several Michigan doctors have been given scrolls in recognition of such achievement.

Michigan Health Council and the M.D. Placement Program

By Herbert Estes



The shapely young blonde tossed her bathing suit onto the rear seat of the three year old convertible with the top down. Then she opened the car door, climbed into the front seat and sat there waiting in the August sunshine.

People passing on the street smiled and waved at her. The slender, good looking young woman in the convertible returned their greetings with the confidence of one who has earned a respected status in the community.

There was no question about the respect she enjoyed from the townspeople. She was the wife of the only Doctor of Medicine in this town of 783 people. She was sitting in the car, which was parked in front of the combination office and hospital, waiting for her husband to finish seeing the morning load of patients. They were going swimming at the lake near the edge of town on his afternoon off.

This would probably be like most other Wednesday or Thursday afternoons. They would no sooner come out of the water and stretch out on the warm sand when the town constable would amble up to inform the doctor a farmer had fallen out of a hay mow or some tourist had been out in the sun too long on the first day.

But that's the way it was—and the doctor loved it. He'd been serving the people of the community ever since he'd found that they needed a doctor when he consulted the M.D. Placement Service of the Michigan Health Council after graduation.

HERBERT ESTES, Ann Arbor, is President of the Michigan Health Council; member of the Board of Trustees of Alma College; and chairman of Michigan Commission on Educational Policies.

The young doctor and his wife are just one of the many examples that make up the story of the Michigan Health Council.

Many organizations are interested in the health of the people. Very often these groups concentrate on a specific disease, such as heart, cancer or tuberculosis. Other organizations concentrate on specific health services like medicine, nursing, or voluntary insurance programs. It's the job—and one of the objectives of the Michigan Health Council to help co-ordinate the efforts of these many health groups.

Now, how do you go about "co-ordinating an effort?" Well, there are many ways, but perhaps the best example is in television. Each health organization would like to tell its particular story through this medium. But if every television station set aside time for individual groups to tell their story, there wouldn't be enough air time left over for Jackie Gleason, Bob Hope, or Giselle McKenzie.

So it's up to an organization like the Michigan Health Council to produce television shows in which all health groups have an equal chance to take part. That's co-ordinating.

Another objective of the Health Council is to conduct a general health education program. People learn about health by reading about it in pamphlets, watching information unfold on television, or viewing a motion picture. The Michigan Health Council provides them with all these tools of learning.

Not being satisfied with co-ordinating health efforts or conducting health education programs, the Michigan Health Council takes all the necessary and practical steps to increase the availability of health services for the people of Michigan as still another objective.

The M.D. Placement Program of the Michigan Health Council is but one of these "necessary and

practical steps." This program helps doctors looking for a community in which to practice—and it helps communities find doctors.

Now that we know what the Health Council tries to do, let's see how it operates. First of all, it's a nonprofit, educational organization. Its voting members are state level organizations which have a major interest in health. These groups support the Health Council with contributions much like stockholders in a large corporation. By belonging to the Michigan Health Council they have a voice in the affairs of the organization. Their dividends are the benefits offered by the Health Council such as an opportunity to tell their story or provide their services to people who need them. At the present time there are forty-six voting members.

In addition to voting members, there are seventy-four associate members. An associate member is a local health council which is formed by people in a community to attack a specific health problem they might have—like an oversupply of rats, an inadequate water supply, or too many unhealthy families.

The Michigan Health Council helps organize the community health councils. This is done by getting key people—a doctor, public official, school administrator, club women—to become members of the newly-formed organization and support it. While the unit is usually formed to combat a health threat to the community, in the long run the health council acts as a board of trustees to consider all health situations in the town.

It's easy enough for a group of people to meet and consider a problem, but the hard part is doing something about it. That's where their associate membership in the Michigan Health Council pays off.

Since the Michigan Health Council is in direct touch with many state level organizations, which have a major interest in health, through its voting membership, the community health council doesn't have to grope in the dark for a solution to its particular health difficulty. Simply by contacting the Michigan Health Council, the people on the local unit can be referred to some organization which specializes in the health aspect of their problem.

This absence of lost motion in moving in on a health problem any place in the state doesn't just happen. It's well planned through the operational set-up of the Michigan Health Council.

The policy-making body of the organization is a Board of Trustees which is made up of voting member representatives. Officers of the Health Council are elected from the Board. The Board meets three times a year to decide what needs to be done to further the objectives of the Health Council. An Executive Committee of the Board also meets periodically throughout the year. So it boils down to this—the "deciders" are in constant touch with what is going on. That means there's a straight line of action from over-all objectives of the Health Council to results.

The Health Council gets results in serving the people by way of projects or programs. There are five basic programs—M.D. Placement Service, Community Health Councils, the Rural Health Conference, television productions, and publications.

The M.D. Placement Service is one of the finest in the country. Operated under the guidance of the Michigan State Medical Society and financed in part by a special annual grant from The Upjohn Company of Kalamazoo, it's a key program to place more doctors in communities where medical service is needed. The Health Council adopted this program in 1952, and by September 1, 1956, had placed 207 M.D.s in Michigan towns and villages.

The Community Health Council program is a true grass roots project which lets the people work out their health problems on a democratic, voluntary basis. At the same time they receive authentic health information at the programs which are presented during their monthly meetings.

The two-day Rural Health Conference, held once a year in January, is the inspirational part of the total Michigan Health Council program. People from all parts of the state gather at the meeting to hear about and discuss health matters that affect them, with authorities in the field.

As an outlet for health information, the Michigan Health Council produces two television programs. One is a weekly presentation on WJBK-TV in Detroit. The other is a bimonthly production on WKAR-TV in East Lansing. The combined audience for both of these shows is in the thousands.

Finally, to round out the Health Council program, publications released by the organization keep the people of Michigan informed. The Michigan Health Council *Bulletin* and *Community Health Council News* are published periodically and reach groups and persons interested in health. Another unique publication is the *Michigan Health Council Directory* which lists the many health organizations in Michigan and describes their functions and services.

Taken all together, these programs, which have only been touched upon very briefly, are the foundation of the Michigan Health Council. They reach out all over the state and touch the lives of nearly everyone in some way.

So the story of the Michigan Health Council is the story of the people. It's the story of the people in the small towns who now have a doctor because of M.D. Placement. It's the story of the people who can do something about better health in their community through guidance and information provided by the Michigan Health Council.

But the program today is not a static thing.

It's growing constantly. In the future there's the possibility of an expanded M.D. Placement program which will bring even more doctors into Michigan. The present health shows in television are only in their infancy. New ideas are being developed to make Michigan a leader in TV productions on health. And more and more people and organizations are being attracted to the opportunities and benefits available to them through the Michigan Health Council. In short, it's a growing, living organization which makes sure "Your Future is Healthier in Michigan."

Public Relations

By C. Allen Payne, M.D.



The basic concepts held by the Public Relations Committee of the public relations responsibilities of the MSMS can be defined as follows: Winning and holding friends for medicine by an organized effort to improve the standards and extent of medical services, plus educative efforts to help people appreciate that only freedom can bring continued progress in their behalf by medicine.

It is well recognized that the medical profession must have a positive, permanent public relations activity and that much of this activity must be carried on by the county medical societies in the home community and by the doctor of medicine in his own office.

Short term "defensive" programs, dictated by circumstances of the past decade have served their purpose. And such tactics in the future will be necessary to meet individual crises as they arise. But the MSMS is determined that there be a well-planned program for affirmative long term action.

Toward that end a series of twenty-six specific projects for county medical societies was developed. These are titled as follows: "The Business Side of Medical Practice," "Twenty-Four-Hour Medical Service," "Blue Cross-Blue Shield Relationship with the Medical Profession," "M.D. Procurement and Placement," "Medical Student Procurement and Medical Scholarships," "Recruitment of Medical Associates," "A Family Doctor for Every Family," "The Establishment of Health Centers," "The Building and Expansion of Hospitals," "The Administration, Reporting, and Referral of Indigent, County, State and Federal Patients," "Providing Means to Maintain Highest Standards in the Administration of Medical Practices," "The Development and Maintenance of a Mutual and Friendly Understanding Between the Press and the Medical Profession," "Use of Pamphlets," "Effective Use of Radio and TV by the Medical Profession," "Medical Forums," "Adult Education Programs," "Use of Motion Pictures for the Public," "The Annual Physical Check-Up," "Indoctrination of Medical Students, Interns, Residents and New Members," "Strengthening Medical Societies," "Cooperation with Other Voluntary Organizations," "Cooperation with Government Agencies," "MSMS Handbook," "Cooperation with Professions and Vocations Whose Science or Work Borders Upon Medical Science and Medical Practice," "Increasing the PR Value of the Woman's Auxiliaries and the Medical Assistant Societies," and "A Legislative Relations Program."

Keystone of the effort to introduce this program has been a series of over thirty public relations conferences held in the major communities in Michigan, at which time officers of the MSMS met with officers of county medical societies and members of their public relations committees. Every county medical society adopted and is carrying out a number of these projects selected by reason of their adaptability to each county medical society's own needs.

The sixty-member Public Relations Committee holds two meetings annually, plus a three-day County Secretaries-Public Relations Seminar each year. At these meetings the entire public relations program is reviewed and directions given for the coming months. MSMS has used practically every communication media with the exception of billboards. Several television programs are telecast each week, an average of twenty radio stations carry daily or weekly programs, four motion pictures have been made, the MSMS exhibit is in constant use and, of course, newpapers are contacted regularly.

Special campaigns or projects occupy the attention of the Public Relations Committee each year. Among these are "Get-Out-The-Vote Campaigns," promotion of Medical Education Week, publicity on the Beaumont Memorial project, et cetera.

Liaison with schools, governmental agencies, voluntary associaitions, the Michigan Health Council, various medical specialty groups and

C. Allen Payne, M.D., Grand Rapids, is immediate past chairman of the MSMS Public Relations Committee; Chairman of the Michigan Cancer Co-ordinating Committee; MSMS Councilor of the Fifth District.

many local groups occupy the time and study of several subcommittees and public relations field secretaries.

Increasing assistance in our PR activities is being received from persons and organizations outside of MSMS proper. This is reflected by the large number of awards given each year to persons, organizations and communication media who have made outstanding contributions in the cause of better health.

However, it is becoming increasingly apparent that many forces are, either unknowingly or purposefully, making inroads upon the freedoms of professional people to practice their respective professions. The ultimate effect of such action is to reduce the effectiveness of the professional man to serve, and to lessen the attraction of a professional career to prospective entrants. The MSMS has an obligation to its members to aid them in the protection of their professional rights and privileges. In the interests of the public weal and the profession's welfare the Public Relations Committee will take increasing cognizance of this problem in future months.

A Library for Public Service

The growing collection of public relations and archival material owned by the Michigan State Medical Society is now undergoing organization into a modern, fast-servicing library.

Accomplishing its essential function, the effective distribution of material, has involved solving the technical problems of acquisition, preservation, and organization of an unusual collection of especially "non-book material"—pamphlets, reprints, picture files, charts, exhibits, radio transcriptions, tape recordings, and films.

The library's holdings of both printed and "audio-visual" matter intentionally exclude medical, technical, or scientific literature. However, because of the vast areas of subject matter which the Public Relations Library must by nature include, its key tool, the catalog, must break this down into a complex range of subject headings, and yet serve as a simple and efficient finding system for this wealth of information.

In addition to catalogs by type of material (films, records, et cetera), the central catalog of the library is planned as a dictionary type card index which will make it possible to quickly approach material on any subject, regardless of its physical form. Being developed is an index of photographic and exhibit material, as well as an extensive newspaper clipping file which covers all areas of medical practice and biographic data on individuals significant to medical work in Michigan. Separately indexed are reports of all legislative action as well as those of meetings in which the Society has been represented or interested. Journals and periodical literature of nationally or logically important organizations are kept for approximately one year. The library also has available pamphlet material for bulk distribution, covering such topics as health education, cancer, polio, socialized medicine, insurance plans, nursing, et cetera.

All other material will be shipped free on loan from the library to schools, institutions, and interested individuals. For this purpose, an up-to-date circulation and charging system is being devised.

The provision of storage space and equipment is the most crucial feature in the success of a unique working collection such as this. Plans for appropriate physical facilities are now being designed to include equipment such as metal shelves and storage cabinets manufactured to house adequately and provide for the future expansion and development of the Public Relations Library in such a way that its services will be provided at a minimum expense of time and effort by clerical personnel.

A Concerted Attack on the Cancer Problem

C. Allen Payne, M.D.

Cancer, annually responsible for the death of well over 200,000 Americans and the cause of untold pain and suffering in those who survive, is one of the major health problems of our time. Interest in an organized effort for the control of cancer, in which the Michigan State Medical Society played an active part, began in 1930 with the development of a "Cancer Week" program by the American Society for the Control of Cancer and the formation of a permanent committee on cancer control by the medical society.

The initial efforts of these groups were directed toward additional education of the medical profession concerning the importance of cancer and newspaper publicity to awaken the interest of the public. The following ten years saw much quickening of efforts of physicians and the volunteer workers of the American Society for the Control of Cancer, with gradually developing liaison between these two groups. This liaison has been of utmost importance in fostering and further increasing the effectiveness of the fight against cancer.

Governmental health agencies, as well as other professional organizations, developed increasing interest in this problem and were invited to send representatives to the Cancer Control Committee. By 1945, the committee membership of twenty-six

included representatives from the two Michigan divisions of the American Cancer Society, the Michigan Department of Health and the Michigan State Dental Association.

Space does not permit the enumeration of the many projects conceived, implemented and completed by the cooperative activities of these groups, nor to tell of the impact of these efforts on the medical profession and the public at large.

Availability of increasing funds for cancer through the yearly campaigns of the American Cancer Society and annual contributions of the federal government to the state health departments made closer liaison and cooperation among all groups interested in this problem more vital if the most effective program for cancer control was to be developed and activated.

Consequently in 1953, the President and the Council of the Michigan State Medical Society formally invited the two Michigan divisions of the American Cancer Society, the Michigan Department of Health, the Michigan Health Officers Association, and the Michigan State Dental Association to form a voluntary cooperative committee to coordinate more effectively the activities of all groups interested in the eradication of cancer as a major health problem. This Michigan Cancer Coordinating Committee composed of fifteen lay and professional members was formally organized, reviewed the activities of the several organizations represented, and developed aims and objectives of its own.

Following this review and a further analysis of the several problems involved, the committee suggested the responsibilities of each of the six organizations in the attack on each problem. The most important problems considered were public education, improvement in the earlier diagnosis and treatment of cancer, statistics, professional education, research, organization and campaign. In developing an all-out program, it was further decided that there should be a regular (annual) review of the activities of the several organizations with criticisms and suggestions for continuation, change in emphasis or possible discontinuance of certain projects. All recommendations of the Michigan Cancer Co-ordinating Committee in its subject to approval of the member organizations involved. It is hoped, however, that this committee will ultimately act in more than a purely advisory capacity and that additional agencies interested in cancer might be added to the representation.

Again, space does not permit recounting all of the activities of this group, but it is pertinent to mention some of the more important projects which have been carried over from the Cancer Control Committee and those developed by the Michigan Cancer Co-ordinating Committee in its three years of operation. For sake of time and space these will be merely listed.

1. Revision, publication, and distribution of the brochure, "The Story of Cancer for High Schools," which now approaches 14,000 distributed copies.

2. Sponsorship of an annual "Cancer Number" of the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, as well as development of a bimonthly "Cancer Comment" page in the same publication.

3. Creation and sponsorship of the annual "Michigan Cancer Coordinating Committee Lecture" at the Michigan Clinical Institute in Detroit on some phase of cancer for physicians.

4. Co-sponsor an annual Cancer Conference for physicians and volunteer workers held in conjunction with the Leadership Training Conference of the Michigan Divisions of the American Cancer Society.

5. Development of liaison with many organizations, including the Michigan Department of Public Instruction, the Michigan Education Association, the Michigan Rural Health Conference and various nurses organizations, to the end that these groups will have speakers on their annual programs stressing the importance of cancer and methods by which teachers, high school and college students, nurses and others may be kept informed about new developments in this field. The committee is glad to furnish speakers on cancer subjects to any statewide organization.

6. Urging each county medical society in Michigan to devote at least one meeting annually to some phase of cancer and supplying speakers on these subjects when requested. So far thirty-eight speakers have been used.

7. Sponsorship of exhibits on cancer (including quackery) at various medical meetings, as well as the Michigan State Fair and other public events or conventions.

8. Encouragement of the greater use of the periodic health examination of well persons in the office of the family physician, to the end that many more cases of cancer will be discovered early enough so that more successful treatment can be carried out.

9. Development of minimum standards of cancer control activities for the member organizations, as well as other groups.

10. Act as a clearing house, in cooperation with the member organizations, for their publications, kinescopes, movies and information about quackery.

11. Publish an annual report on Cancer Control Activities in Michigan.

12. Encouragement of county medical societies and hospital medical staffs to develop "Cancer Registeries."

Finally, I would like to say that the job is only begun. The outlook for the future is excellent if we continue in the direction in which we have started. The projects mentioned above, as well as others already begun, will require much more time, cooperative effort and liaison.

In a sense, this is a preliminary statement of our activities and our aims. It is the sincere hope of the members of this committee that our efforts will be an additional stimulus to closer cooperation and liaison, not only among the organizations represented at this time, but also to other organizations who may join us in the future and in fact to all organizations and individuals interested in the earliest possible solution to the many facets of the perplexing problem of cancer control.

New Hope for the Aged

By A. Hazen Price, M.D.



The Geriatrics Committee of our State Society was formed several years ago when it was apparent that the number of older persons in our population was increasing rapidly. Medical science had prolonged the span of life over the past fifty years so that more and more people were reaching the age of sixty years and beyond. The proverbial three score years and ten soon became the life expectancy of a person born in 1950. If scientific research progresses at the current rate, it will not be unreasonable to predict that more people will not only live longer, but that the actual length of life will approach the century mark in the not too distant future.

As the number of older persons increases so does the number of individuals with some type of cardiovascular or neoplastic disease. More people are now living to the age when these abnormalities are most commonly observed. This means that the percentage of older patients in the doctor's practice will increase, be he a general practitioner, internist or surgeon.

The physician has taken care of older people before so he will continue to give them the advice and attention they deserve, but with a much greater sense of optimism. He no longer holds an attitude of hopelessness for the older patient who fractures his hip or one who needs prostatic surgery. He knows that antibiotics will most often clear up a pneumonia or some other infection, which, until the present day, meant death in a large percentage of cases. He has been taught to get his patients out of bed as early as possible, regardless of what illness they may have and thereby prevent thrombophlebitis and embolism. He realizes that many illnesses are not very hopeful, yet they are not nearly as hopeless as they used to be. We have learned that individuals oftentimes have much more reserve than we suspected and, given the help of modern methods, they oftentimes make a spectacular comeback.

All these facts point up the responsibility of the physician in the care of older people. Unfortunately, all medical men do not have the personality makeup to give the older patient the care and attention he needs. Some are apt to be too cursory in their examination and too abrupt in their explanation. Too many symptoms are explained as being due to old age and without sufficient emphases on all the normal findings. The patient frequently leaves with a hopeless outlook, which could have been changed completely by the application of just a little practical psychology.

Your Geriatrics Committee has made an effort to familiarize physicians of the state with all the best methods of caring for the older patient, through the Geriatrics Conference for physicians held in Ann Arbor one year ago and again this past summer at the Ninth Conference on Aging where "Health for the Aging" was the over all theme. Each year for the past three years the May issue of the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, all or in part, was devoted to geriatric subjects. The May number of 1957 will be entirely a geriatric issue and should contain a wealth of information.

During the last session of the legislature, a bill was passed transferring the licensure of nursing homes and homes for the aged to the State Department of Health. This bill was heartily endorsed by your Geriatrics Committee, for it has been felt for a long while that the operation of nursing homes and homes for older people had not always been in the best interest of the patient. The old law contained very few standards for good patient care, and it is hoped that under the supervision of the Department of Health these will be greatly improved. The Commissioner of Health has assured us he will seek our advice in planning just what the standards should be.

Your committee has recognized that medical care alone does not always solve the problems of the older person, so it has co-operated fully with each of the last four conferences on Aging held in Ann Arbor, under the auspices of the Department of Gerontology and co-sponsored by the Michigan State Medical Society. Employment, housing, economic security, as well as health have all been considered in an effort to cover all the various phases in the gerontologic field. Next year at the Tenth Annual Conference on Aging, we shall again have a part in developing and fulfilling the program.

There is being formed this year a Michigan State Gerontologic Society, to be made up of individuals in all walks of life who are interested in this field. Your committee will have an active part in its formation.

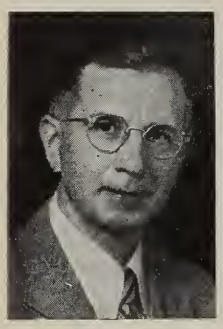
Our program for the past few years has been to make every effort possible to inform physicians

A. HAZEN PRICE, M.D., Detroit, is Chairman of the MSMS Geriatrics Committee, and Delegate to MSMS House of Delegates.

of the needs in the care of older persons; to interest more physicians in the over all problem so that they can initiate projects in their own communities helpful to the older members of the population; to improve conditions in nursing homes so that patient care and rehabilitation will, at all times, be the first consideration; and above all to change the older attitude of hopelessness to one of optimism in the minds of physicians and patients alike.

The Rheumatic Fever Control Program

By Leon De Vel, M.D.



The Rheumatic Fever Control Program of the Michigan State Medical Society was conceived during the Second World War, when the Preventive Medicine Committee of the Society became aware of the reports of the Michigan Selective Service Boards indicating a considerable number (approximately 16 per cent) of rejections of draftees because of cardiovascular disease. About 40 per cent of this group of young men were found to be disabled because of rheumatic heart disease. Current medical knowledge indicates that some of these could have been prevented by the application of appropriate protective measures, and that most of the others could have been helped by the use of modern therapeutic and prophylactic methods. The Preventive Medicine Committee therefore recommended to the Council of the MSMS that a program of education, case finding and community service be instituted with a view to containing and controlling the disease. The Council thereupon appointed a Committee on Rheumatic Fever Control with instructions to establish and develop such a program on a statewide basis.

The long-range objective of the Rheumatic Fever Control Program is nothing less than the complete eradication of rheumatic fever and its aftermath of rheumatic heart disease from the State of Michigan. However, the realization of this objective does not seem to be in prospect in the foreseeable future because a vast amount of research into the fundamental causes of the disease still remains to be done.

The immediate objective of Rheumatic Fever Control, as the name indicates, is to strive for the fullest application of our present considerable knowledge of the disease to the individual case or suspected case, in order to provide the best care modern medicine has to offer at the earliest possible time and to apply preventive measures where such is possible, thus limiting the onslaught of the disease.

The Rheumatic Fever Control Program of the MSMS, was launched in 1945 under the able leadership of Frank Van Schoick, M.D., first chairman of the Rheumatic Fever Control Committee, later succeeded by Scott T. Harris, M.D., chairman of the committee at this time. A full time medical co-ordinator, Leon De Vel, M.D., was appointed in 1949.

Since education is the foundation of all progress, great emphasis has been placed on this particular aspect of the program: education, not only of the profession to bring to them regular reports of the latest scientific advances, but also of the general public to create awareness of the disease, for even the best physician cannot help the person who does not present himself for care when his case is still amenable to efficient treatment.

The Rheumatic Fever Control Program of the MSMS is essentially a decentralized activity based on participation of the several county medical societies located in Michigan cities which are the logical health and medical centers for their geographical area. Such local Rheumatic Fever Control Committees are in existence in the following cities: Alpena, Ann Arbor, Bay City, Benton Harbor-St. Joseph, Detroit and Wayne County, Grand Rapids, Jackson, Kalamazoo, Lansing, Muskegon, Petoskey, Pontiac, Royal Oak, Saginaw, Sault Ste Marie, Traverse City. Rheumatic Fever Diagnostic and Consultation Centers located in these cities are a feature of the program; they offer diagnostic and consultation services to the physicians in the area, thus placing modern medical facilities reasonably within the reach of every child or adult within the State, and preserving the all important patient-physician relationship. Medical care, educational capabilities, rehabilitation and job placement are carefully evaluated in each case.

The Michigan Crippled Children Commission, under the leadership of Carleton Dean, M.D., co-operates outstandingly in the implementation of the program. Financial support was supplied originally by the Michigan Society for Crippled Children and Adults, Inc., later, and exclusively at the present time, by the Michigan Heart Association.

Leon DeVel, M.D., Grand Rapids, is Medical Coordinator of the MSMS Rheumatic Fever Control Program; Member of the first MSMS Rheumatic Fever Control Committee; Fellow of the American Academy of Pediatrics.

To Improve the General Welfare

By George W. Slagle, M.D.



For the past seven years an Advisory Committee of your Society has worked wholeheartedly with the Michigan Social Welfare Commission through its able director, Mr. W. J. Maxey. Our program has evolved itself into the following three main fields of endeavor:

1. That all persons deserving medical care in the four categories, namely, Old Age Assistance, Aid to the Blind, Aid to the Dependent Children, and Aid to the Disabled, shall receive it.
2. That the process of obtaining this care be made as simple as possible for the applicant, the bureau, and the doctor.
3. That the cost to the Commission, and thereby to the taxpayer, be kept at the minimum commensurate with adequate medical care.

GEORGE W. SLAGLE, M.D., Battle Creek, is Chairman of the MSMS Liaison Committee with the Michigan Department of Social Welfare; President-Elect of MSMS; Member of the Board of Directors of Michigan Medical Service; and Alternate Delegate to the American Medical Association.

With these precepts in mind, and with the full co-operation of the Welfare Commission, several ends have been accomplished. Applications indicating the need of the client have been made more efficient through streamlining, thereby saving important time to all parties concerned. The physical examination form has been condensed, saving the doctor valuable time, yet giving the reviewer the needed information for arriving at a just decision. Also, this past summer and fall, an "actual cost" sheet has been adopted on a statewide basis, so that the client will receive the drugs and medical care that is necessary. Pilot studies showed that this plan eliminated a certain amount of "chiseling" and ensured the utilization of services where needed.

Our program has also been directed toward the improvement of medical care in the boys and girls vocational training schools; toward the better assistance in the Aid to Dependent Children category, including projected dental care; toward more adequate care in the totally disabled category; toward co-operation with the Vocational Rehabilitation Commission, and to many allied programs.

Drs. Milton Shaw, J. K. Altland, Wilfrid Haughey, L. E. Himler, Frank L. Doran and L. G. Christian have helped inestimably to further this program.

Michigan Doctors Serve in Key Advisory Role in Statewide United Campaigning

By Bradley M. Harris, M.D.



The Michigan United Fund has reached its national preeminence through a well-coordinated and scientifically conceived plan for federating health and welfare appeals. It was inevitable that the Michigan State Medical Society would be called upon to contribute its interests and capacities to the growth of this humanitarian endeavor.

BRADLEY M. HARRIS, M.D., Ypsilanti, is Chairman of the MSMS Advisory Committee to the Michigan United Fund; Member and Secretary of the Board of Directors of Michigan Medical Service; MSMS Councilor for the Fourteenth District; Member of the Board of Trustees of Michigan United Fund.

It was my privilege to be delegated by the Council to represent the Society and to offer every assistance possible. The scope of the problems involved was so broad that it was deemed advisable to develop a committee whose varied training and interests could more adequately cope with them.

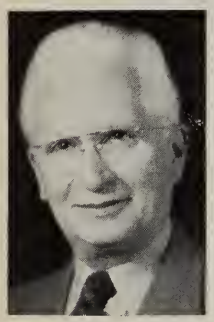
Doctors currently serving on this committee are: R. J. Bannow, M.D., Pontiac; Carlton Dean, M.D., Richard W. Polmeroy, M.D., and Oliver B. McGillicuddy, M.D., Lansing; Melvin Pike, M.D., Midland; Harry B. Zimmer, M.D., Lapeer; Harry H. Towsley, M.D. and Roger B. Nelson, M.D., University of Michigan; Ralph Johnson, M.D., and H. B. Fenech, M.D., Detroit; and B. M. Harris, M.D., Ypsilanti.

During the past two years the members of the committee have given unstintingly of their

time and special talents to the study of various questions. With their clinical and scientific medical background a medium has been established through which the health agencies of the Michigan United Fund can present a sounder and better balanced program. The ultimate result is an increased public confidence in and an enhanced public support of the Michigan United Fund. This year they have contributed materially to a fair and intelligent allocation of the $2,925,000 budget, made possible through voluntary contributions of the people of Michigan. This work is still another area in which medical philosophy and training find a great opportunity for service—a service which can be richly rewarding individually, collectively and professionally.

Organized Aid to Medical and Health Education

By Earl Ingram Carr, M.D.



Michigan has blazed many trails of progress in medicine and in health education. The Michigan Foundation for Medical and Health Education is an outstanding example.

At an early date, effort was directed toward providing postgraduate medical education. Before the turn of the century, medical graduates were admitted to medical courses in the University of Michigan, and in 1899 an annual clinic was inaugurated by the Detroit College of Medicine and Surgery, now Wayne State University of Medicine. Postgraduate medical courses were conducted by two county medical societies in 1907. A health education program, centering on School health and adult health education, was instituted in 1921 by the State Medical Society under the leadership of Doctor B. R. Corbus. Recommendations of a committee from the Michigan State Medical Society, the University of Michigan and the Detroit College of Medicine resulted in the establishment in Ann Arbor of the Department of Postgraduate Medicine headed by the late Dr. James D. Bruce in 1927. The next year, the two schools and the State Medical Society established a committee to set up the Postgraduate Medical Education Program in Michigan with teaching centers selected with consideration to geographic distribution.

With this background and a determined desire for financial security against interruption of these programs, the Michigan Foundation for Medical and Health Education came into being with purposes as its name implies, and incorporated specifically "To acquire, provide, use, develop, endow, and finance methods, means and facilities for postgraduate education in medicine, for education in medicine, for lay health education, and for research, fellowships and scholarships." The organizing meeting of the Foundation was held in Detroit, September 19, 1945. The corporation is composed of a membership consisting of the members of The Council of the State Medical Society and others duly elected and of a board of nine trustees, three of whom are lay and six of whom are doctors of medicine. The membership is synonymous with stockholders and the Board of Trustees is the administrative body.

Funds have accumulated from gifts, the largest to date being derived from the estate of Doctor and Mrs. Andrew P. Biddle. Amounts of many sizes have been received and any sum given to the general fund or to designated purposes, subject to the approval of the Board of Trustees, has been and will be gratefully received.

Many county medical societies have made substantial outright contributions to the general fund. Ingham County Medical Society has made available a $6,000.00 fund designated for student aid to Ingham County residents. Barry County Medical Society has voted $5,000.00 for student aid to Barry County residents in medical school. Both of these funds are operated under the Foundation Student Loan Plan. Many doctors, laymen and organizations have given generously. Future gifts have been planned through wills and by life insurance.

Another idea has tremendous potentialities and is viewed by the Foundation with great favor, the LeFevre Plan. It requests every doctor in Michigan to remember the Foundation with a check on his birthday with any amount, small or large, which his interest and ability leads him to determine upon. This method of annual payment gives the contributor satisfaction and gives the Foundation an annual income. Continuing contributions make possible enlargement and expansion of Foundation activities.

The Foundation is engaged in many sponsorships and has stood ready to participate to its fullest capacity in all needs in Michigan pertaining to education in medicine, hygiene and health,

Earl I. Carr, M.D., Lansing, is President of the Michigan Foundation for Medical and Health Education, Inc.; Member of Board of Directors of Michigan Medical Service; Trustee of Michigan Health Council; and Vice-Chairman of MSMS Postgraduate Medical Education Committee.

needs of students, the profession and of the public. The establishment and maintenance of the Revolving Student Loan Fund provides for supplemental financial aid for established medical students and all applications from medical students from the two Michigan medical schools are given full and thoughful consideration. Many interviews pertain to guidance and not finance. Thus far, every applicant who has qualified by status and consent to the rules of the plan has received a favorable action by the qualifications committee and approval by the Board of Trustees. All loans are non-interest bearing until the borrower has been in practice one year. Two substantial loans have already been repaid in full.

Another gratifying activity has been the yearly financial sponsorship of the annual Rural Health Conference. The Michigan Rural Health Conferences have been patterns for the nation for ten years. The Michigan Health Council has furnished the able and effective manpower through Mr. E. H. Wiard and his staff. To have assembled more than a hundred other co-sponsors representing educational, health, agricultural and public agencies of Michigan is proof of the worth of this Foundation project.

The Foundation participates in the issuing of diplomas to attendants of the biannual regional postgraduate courses, associate Fellowships being conferred in four years and Fellowships in eight years.

The Foundation has responded wherever asked to participate in the interest of health and education. It provides honorariums for the annual Biddle Lecture at the Michigan State Medical Society Annual Session and for the Foundation Lecture at the Michigan Clinical Institute.

The overhead expenses of the Michigan Foundation are almost nil. The facilities of the offices of the president and secretary-treasurer have been available, and since its incorporation, have been used for all administrative, secretarial, advisory and accounting services at no cost whatsoever to the Foundation. Expansion and growth of the Foundation depends upon contributions to the fund and continued conservative and judicious administration by the Trustees.

MSMS and the Legislature

By Lawrence A. Drolett, M.D.



A statewide organization such as the Michigan State Medical Society has an obligation not only to its membership but also to the people who are served professionally by that membership.

The legislative representatives of these same six-and-one-half million people are similarly charged with this same responsibility of "service to all."

It is natural, therefore, that the lawmakers of Michigan and the Michigan State Medical Society should work together to develop and to enact legislation which will insure the citizens of Michigan the best health program possible.

As is necessary in any large organization, certain duties must be delegated to committees. The Michigan Senate and House of Representatives each name special health committees to which all health proposals are referred for study prior to general consideration by the entire membership of those bodies.

Let us consider these tools with which the MSMS shapes, develops and delivers to the Michigan Legislature and to Congress its legislative program each year.

The policy making body of MSMS is its House of Delegates. This is made up of representatives from each of the fifty-five county medical societies, who meet annually as a group to determine the general policy of the State Society with respect to health proposals anticipated in the next legislative session. It also formulates measures to be presented to the legislature for adoption. It should be noted that in the interim between annual meetings of the House of Delegates this authority is delegated to The Council of the State Society and to its Executive Committee. These, in turn, work through the legislative committee.

The Legislative Committee of the State Society is composed of sixteen doctors, all of whom have an intimate knowledge of the many problems facing not only the medical profession but the citizens of the state as well, particularly those problems which relate to providing of health care to those citizens. These men also have a rare insight into the so-called "legislative process."

Lawrence A. Drolett, M.D., Lansing, is Chairman of the MSMS Legislative Committee, and Member of Board of Police and Fire Commissioners of Lansing.

The other committees of the society to which legislation is referred for study, (Child Welfare, Cancer Control and Industrial Health, to name but a few) are made up of experts in each particular field. Their opinions are invaluable and many legislative advances in the betterment of health care for the people of Michigan must be credited to their authoritative advice. For example, a proposed bill dealing with industrial health would be referred to its Industrial Health Committee for approval and recommendation. Then the Legislative Committee would take action accordingly. It is evident that, if MSMS is to pursue an effective legislative program, the groups described above must operate in a definite coordinated effort.

Very few of the 900-odd bills introduced in a regular session originate wholly in the mind of a legislator. An organization, such as MSMS, or a group of people, or an individual constitutent formulates an idea or proposal, enlists the support of members of the House or Senate who introduce the bill, and then guides its passage through both houses.

Whatever position the Michigan State Medical Society takes on a particular piece of pending legislation would be of little consequence if the members of the legislature did not give an attentive ear to the Society's opinion. The legislature has often sought the attitude of MSMS regarding the many specialized areas of health care and the Michigan State Medical Society has not violated this trust.

As a result of this co-operation great strides have been taken to assure Michigan citizens the best possible medical care. Vast sums of money have been appropriated to the universities and the health agencies of Michigan to provide advanced research, treatment and teaching facilities. The federal Hill-Burton Act has been implemented to provide for construction of new hospitals in all parts of the state. The antiquated coroner system is being replaced by a medical examiner program. Polio and other dread diseases are being checked in the laboratory and in the family doctor's office. Space does not permit an itemization here of all the many advances in health care made possible by this co-operation between the legislature and the medical profession.

Many problems, however, still face solution. The expansion of medical training personnel is necessary. Problems affecting migratory labor and the handling of radio-active materials need study. A single act covering all the healing arts is another proposal concerning which the State Society's advice will be needed by the legislature. Mental health and chronic disease are two fields that continually demand attention.

It is clearly evident that the changing times constantly present new challenges to the legislature and to the medical profession. By working together these two groups can continue to provide the people of Michigan with better health care.

Recommendations for Tuberculosis Control

By J. W. Towey, M.D.



Rapid changes in the tuberculosis picture create increasing problems for your Tuberculosis Control Committee. Your committee has endeavored to meet its responsibility by setting up certain broad recommendations, namely:

1. They strongly emphasize that sanatorium care offers the best treatment for the tuberculosis patient and they discourage home treatment for patients suffering with active, tuberculous disease. They feel that all patients should have an initial indoctrination period in a tuberculosis sanatorium.

2. They still do not approve the curtailment of sanatorium beds or diversion to other purposes until the tuberculosis problem in any certain area is fully under control.

3. They strongly support statewide and local case-findings programs by supporting requests for sufficient appropriations to provide the facilities for adequate tuberculosis control; namely, the mobile x-ray units, laboratory facilities, and a strong central tuberculosis control unit to supervise the program.

4. The committee recognizes that eventually case finding in tuberculosis must become the responsibility of the private practitioner. Every effort is being made to maintain the interest of the private practitioner—speakers are subsidized for local and state meetings, frequent articles are printed in state medical journals, and educational pamphlets are being distributed to the general practitioners, emphasizing the need for tuberculin tests, chest x-rays, et cetera.

The committee recognizes that without the aid of a specific immunizing agent we can expect tuberculosis to be with us for an indefinite period. Your committee will continue to function in cooperation with other organizations to prevent any resurgence of the disease.

J. W. Towey, M.D., Powers, is Chairman of the MSMS Tuberculosis Control Committee, Medical Superintendent of Pinecrest Sanatorium.

Seeking Answers to the Problems of Children

By R. M. Heavenrich, M.D.



John Switchpress, M.D., is chronically dyspeptic because babies he delivers get chemical conjunctivitis after silver nitrate. Should the State Health Director request legislation to discontinue silver nitrate and substitute an antibiotic?

Betty B. is about to have a baby, but Betty isn't married. What are the ethical and medical factors of adoption?

Should the State of Michigan continue free distribution of polio vaccine to doctors?

These were questions raised before the Child Welfare Committee during the last year.

This committee serves The Council of the State Medical Society as the source of information and interest on all matters of child health and welfare. In reality, it is a subcommittee of the Preventative Medicine Committee, and its chairman represents his group on the parent committee. This promotes co-operation with other groups and prevents duplication. Much of the accomplishments of the Child Welfare Committee are through standing subcommittees: Ophthalmology, Otolaryngology, and School Health. The committee consists of medical men whose primary interest is children, be they generalists, pediatricians, otolaryngologists, ophthalmologists, or representatives of other disciplines of medicine.

The committee acts as a liaison between the MSMS and the State Department of Health. Goldie Cornieluson, M.D., Director of the Maternal and Child Welfare Division of the Health Department, has been one of the most loyal and inspiring members of the committee, a constant provider of resource material, and a person of unusual ability to "follow-through."

The committee acts as a liaison between the MSMS and the Michigan Crippled Children Commission, whose director, Carlton Dean, M.D., has also been a strong member.

Problems have been referred by the Executive Committee of The Council, others by the State Health Department, while many are raised by committee members themselves. For example, several schools originally asked the State Health Department about the purchase of expensive equipment for eye testing for driver-training students. This was referred through channels to the Subcommittee on Ophthalmology. This subcommittee is under the able chairmanship of Don Marshall, M.D., who, according to records, has never missed a meeting. In elaborating on the original question, the subcommittee discussed visual requirements for driver-training, optimal methods of examining eyes of all school children, and need for education on visual problems in children. This we hope will be furthered through articles in the JOURNAL, speakers at the Michigan Clinical Institute, and possibly by exhibits and pamphlets for distribution to Michigan physicians.

The committee thus tries, after approval by The Council's Executive Committee, to disseminate in one way or another information and conclusions both on treatment and prevention. Last year, for example, in co-operation with the State Health Department, following action of a special subcommittee on retrolental disease, placards were sent all hospitals recommending use of low oxygen concentrations for infants. Since, there has been a precipitous drop in new cases of infant blindness.

In other ways we help Michigan medicine. The School Health Subcommittee, under V. G. Chabut, M.D., is constantly co-operating with the Michigan School Health Association on matters of health and health education in our schools. The teachers of the state look to this group for leadership and help. The subcommittee is studying new school physical examination forms that we might have uniform records in all our schools. And we are contemplating more school health councils and other ways in which doctors can contribute to the school system.

The very existence of the committee focuses interest of doctors and the State Society on problems of children. During 1956, the year in which Olympic records will fall, Michigan births will leap to a new height, over 200,000! Even doctors are having bigger families. With 55 per cent more children alive under five years of age compared with ten years ago, with birth rates rising and death rates falling, we are creating new problems. While we are perhaps conquering polio and retrolental disease, what about the spastic, blind, epileptic, delinquent? If the handicapped survives, then we must see his life made better, better for him and his family. In the near future to streamline our activity yet broaden our scope, we hope the Child Welfare Committee will act as a steering committee, composed of chairmen of several subcommittees. This would allow development in fields of accident prevention, poison centers, perinatal mortality studies, the handicapped, adoptions, delinquency, hospital problems, and others.

Some subcommittees have occasionally attained such stature that they out-grew their diapers, as

R. M. HEAVENRICH, M.D., Saginaw, is Chairman of the MSMS Committee on Child Welfare.

the Rheumatic Fever Committee and Iodized Salt Committee. While independent, we still hold these to be our adolescent children, and we remain proud parents for what they have accomplished.

We, of course, do not lack for projects. Our problem at present is threefold: first, to streamline our functioning through a steering committee; second, to limit our efforts not to be too thinly spread and ineffective; and third, to stimulate county societies to have active Child Welfare Committees to function locally, to stimulate interest there and to further our objectives, and conversely to help direct our efforts and stimulate us.

Drs. Harry Towsley, Frank van Schoick, Bob Mason, and George Anthony not only are past chairmen of this committee, but continue attending meetings to help with their wisdom and experience. And Bill Jones, Jr., of Menominee, kith and kin of Bill Jones, Sr., immediate past president of MSMS, while Vice Chairman of the group, is the man who travels farthest, but never misses a meeting. It is men like these and many other equally conscientious who continue to travel far, sacrifice time, energy, and their practice, who prove the importance, responsibility, and future possibilities of the Child Welfare Committee.

Possibility Toward the Prevention of Highway Accidents

By John R. Rodger, M.D.



Michigan's doctors experience day by day the tragedy of the havoc on our highways more than do any other groups, except perhaps the law-enforcement officers and the undertakers. For this reason the Committee on the Study of the Prevention of Highway Accidents was formed two years ago at the direction of the House of Delegates.

Its purpose is primarily to study the medical aspects of traffic accident prevention. Who should and who should not drive a car in Michigan? How can we make better drivers? What are some of the medical problems attendant on safe driving? The committee offers itself as a consultant group in these matters to Michigan's law-enforcement agencies, administrative offices, and legislature.

The committee's most recent work was to prepare an outline of a physical examination for school bus drivers. At the present time all that is necessary to drive a school bus in Michigan is to have a chauffeur's license. The problem was tragically illustrated last winter when an Ingham County school bus driver with a full load of youngsters died of a heart attack at the wheel of his bus. He had been hired in spite of the fact that he had been retired from the Lansing fire department because of heart disease. While there is still no law requiring school bus drivers to have physical examinations, this outline prepared by the committee will be offered to districts by the Department of Public Instruction as a suggested procedure for them to use.

The committee recently studied the license application forms (first license and renewal) of the New York State Vehicle Department in relation to the health questions asked on them. If any of the questions are answered "Yes," then the applicant must obtain a certificate from a physician stating that he is competent to drive a vehicle.

These questions are: "Have you ever had: Epilepsy? A stroke? Excessively high blood pressure? Diabetes? Bright's disease? Fainting spells? Any heart ailment? Have you defective hearing? Since the last license was issued have you had any mental illness? Suffered any disability? Been confined to any hospital, public or private institution for mental illness? Suffered a physical deformity or loss of leg, arm, hand or foot? Are you crippled in any manner?" To this our committee asked two more questions: "Do you use drugs persistently? Do you use alcohol persistently?"

In New York State, a knowingly false answer to any of these questions constitutes a misdemeanor. The Legislative Committee of the Michigan State Medical Society is at present considering the advisability of having some such application form considered in Michigan, either under regulation or by new law. The Traffic Study Committee recognizes that while this still leaves much to be desired, it is still a great improvement over the present almost total lack of consideration of physical and mental health conditions in the granting of driver licenses.

Michigan's new driver-training law is, in the opinion of the committee, one of the most worthwhile traffic safety measures to be passed by the

John R. Rodger, M.D., Bellaire, is Chairman of the MSMS Committee for the Prevention of Highway Accidents; Past Chairman of the Michigan Rural Health Conference; Alternate Delegate to the American Medical Association; Member of Advisory Committee to the Office of Michigan Hospital Survey and Construction.

legislature in many years. The committee helped to create public opinion favorable to the driver training legislation by pointing out the preventive medicine argument for it. Twenty-five per cent of all of Michigan's traffic fatalities for years have involved drivers under twenty-five years of age, and National Safety Council figures show that the young drivers who have passed an approved driver-training course have one-half the accident rate of those who have not passed one. Raising the previous 25 per cent student participation in driver-training to nearly 100 per cent will result in a 10 per cent reduction in expected traffic deaths after the ten years it will take to provide driver training experience for all of Michigan's drivers then under twenty-five years of age.

Traffic experts predict a 45 per cent increase of vehicle-mileage in the next ten years. That means that in the same length of time we must show a one-third reduction in our accident rate in order even to stand still. The Michigan State Medical Society pledges itself to do its share in bringing about this and even greater reductions in our highway havoc.

Michigan Medical Service---Success Story

By Wilfrid Haughey, M.D.



Economic crises always find solutions and mostly from unexpected sources. The medical services to millions of our people and the preservation of private practice of medicine were at stake for a score of years including the nineteen-thirties. Only the comparatively well-to-do were able to afford the medical and hospital services which our modern science had made available. The nation was going through the longest and most severe "depression" of its history.

Our hospitals had no endowed resources and were obliged to pay their own way, or depend upon very inadequate public support. Our doctors were struggling against a growing demand that government take over and give us "compulsory health insurance with no cost to the recipient." The American Medical Association and the profession generally had the reputation of always "opposing some medical legislation."

The Michigan State Medical Society and its farseeing leaders begged insurance companies to offer prepaid relief, but were told medical services were uninsurable. Officers of national medical organizations counseled against efforts of groups to provide economic aid to our desperate patients. "Leave insurance to the insurance companies," they said.

A state medical society committee and several county groups made studies and proposals, which after several years and many rebuffs led to the establishment of a voluntary nonprofit health care plan. Michigan Medical Service was the first statewide plan, and by trial and error, evolved into the type of present prepayment medical program which covers almost the entire nation today. The late Senator Vandenberg praised our accomplishment in proving that private industry could provide for the distribution of adequate medical care to under-income people. He said we had "stayed socialized medicine" and would do so as long as we had a successful voluntary health program. The pioneers had vision and the unalterable determination to succeed.

The first Board of Directors of Michigan Medical Service, established November 30, 1939, consisted of Doctors A. S. Brunk, H. R. Carstens, B. R. Corbus, H. H. Cummings, L. Fernald Foster, Wilfrid Haughey, R. H. Holmes, Wm. A. Hyland, H. A. Luce, V. M. Moore, R. H. Pino, P. A. Riley, O. D. Stryker, P. R. Urmston, and laymen William J. Burns, William J. Norton and Dora Stockman.

Two of these members, Drs. Haughey and Riley, have been in continuous service. Dr. Hyland was off the board for one year and Dr. Foster was off for two years. In 1940, E. I. Carr, M.D., and John Reid were elected to the board and still serve. W. H. Huron, M.D., was also elected but had an interval of three years when he was off the board. Robert L. Novy, M.D., was elected to the board on September 17, 1941, and was made President in 1943. He contributed in incalculable measure during his service of twelve years to the success of Michigan Medical Service.

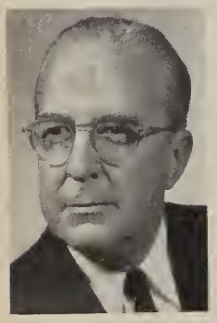
In rendering credit, the Executive Committee of the Council of the Michigan State Medical Society in the years 1937, 1938 and 1939 must not be forgotten. That small group would not be downed but took over and carried on in spite of almost insuperable obstacles.

Today, Michigan Medical Service protects over 3,000,000 people in Michigan, approximately half of the population of this state.

Wilfrid Haughey, M.D., Battle Creek, is Chairman of the Board of Michigan Medical Service; Editor of The Journal, MSMS; and Past President of MSMS.

In Behalf of the Worker in Industry

By Orlen J. Johnson, M.D.



The activities of the Committee on Industrial Health of MSMS are designed primarily to improve the health of workers. The achievement of this end necessarily requires entrance into numerous facets of medicine and related fields.

In consideration of the health of workers in industry he must be brought to or maintained in a well condition physically and emotionally. Second, he must be placed at work that is not detrimental because of the environment or having requirements for which he is not equipped. In this same scope of activity, many handicapped persons can be given useful occupation. These can be accomplished by all industries regardless of size having a medical program suitable to their needs, providing preplacement and periodic physical examinations and control of the working environment. Equally important is the prevention and care of illnesses and injuries arising out of employment.

One result of an adequate industrial health program less readily recognized is better understanding and relationship among labor, management and the medical profession.

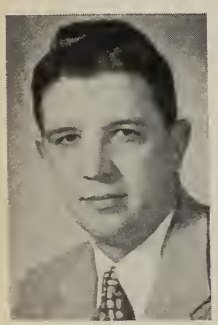
A program of industrial health in a community should be one of the activities of local medical societies and individual physicians. The Committee on Industrial Health is attempting to stimulate interest by having members on the committee from all areas of the state. Under the aegis of the state committee, a group under the direction of T. I. Boileau, M.D., of Detroit, is preparing a plan for a health program in small industries.

The benefits to all concerned can be considerable when such a co-operative program is put into effect.

Orlen Johnson, M.D., Bay City, is Chairman of the MSMS Committee on Industrial Health; Alternate Delegate to the American Medical Association; Delegate to the MSMS House of Delegates; Chairman of the Public Relations Committee of the Bay County Medical Society.

Improving Blood Banking

By R. L. Mainwaring, M.D.



The objective of the Michigan State Medical Society's Committee on Blood Banking is to keep improving blood banking in all of its phases, both technical and administrative, and to offer more useful and adequate service to the communities, hospitals and persons needing blood.

In order to obtain the cooperation of the blood banks, it became necessary to have an organization to which these blood banks could turn to coordinate their efforts. Under the sponsorship of the Michigan State Medical Society, the Committee on Blood Banking organized the Michigan Association of Blood Banks with the idea that it was necessary for the blood banks themselves to cooperate in the program in order to exchange ideas and disseminate information relating to their problems and technical methodology.

The projects which were started this year are not completed but we have surveyed the blood banking facilities of the state of Michigan and are now in the process of attempting to analyze the results. A workshop for blood bank technicians has been planned by the Michigan Association of Blood Banks for the early part of November in conjunction with a scientific program. As new methods appear which are acceptable and proven, we hope to disseminate this information and encourage institution of these new methods in order to maintain high standards of service.

One aspect of blood banking which is rather new and unique is the National Blood Bank Clearing House program. We feel this is a major advance in the administrative field of blood banking and are urging the banks in Michigan to join the North Central District Blood Bank Clearing House. This program allows donors in one area of the United States to give blood for a patient

R. L. Mainwaring, M.D., Allen Park, is Chairman of the MSMS Committee on Blood Banks.

in another area. This is advantageous for several reasons including the fact that actual replacement of the blood is increased where patients are hospitalized away from their family contacts; also there is the added convenience for the donor and the recipient; and the drawing of blood in the same community makes for greater responsibility and safety of blood transfusion as well as reducing the cost by use of the blood where it is drawn rather than having to ship it from one bank to another.

All of the above projects are being worked on at the present time and a few of the men who have been active and interested in the field of blood banking and who have aided immensely in the organization of the Michigan Association of Blood Banks are J. A. Kasper, M.D., E. R. Jennings, M.D., and W. G. Gambel, Jr., M.D. Dr. O. Vander Velde has been acting as one of the directors of the North Central District Blood Bank Clearing House.

In the future we expect to expand the educational and scientific programs as this young field is constantly changing.

To Defeat the Cancer Quack

By W. A. Hyland, M.D.



The Michigan State Medical Society Committee on Cancer Quackery is a subcommittee of the Cancer Co-ordinating Committee of Michigan.

The state medical society of California organized a California Cancer Commission a few years ago to deal with all phases of cancer, namely, causes, diagnosis, treatment and end results. This group was to advocate and expand tumor clinics in hospitals, to promote widespread interest of the staff doctors in discussing at length the aid to be given all, and particularly the advanced, patients.

The commission goes further; in cases of alleged quackery or use of unorthodox or unproved treatment, the doctor, whether a member of a hospital staff or not, if he has a license to practice medicine in California, is given an opportunity to present his case to the commission tumor board. The medical director of the Cancer Commission requests the material of the doctor involved and presents it to a teaching or research group to pass upon its merit, which includes examining the patient and the tissue removed. In this way, wide publicity was given in the newspapers with the result that several quacks were exposed within a short time after the commission began to function.

At its annual meeting in September, 1955, the House of Delegates of the Michigan State Medical Society approved a Michigan group to study quackery. The President requested the Cancer Coordinating Committee to work on this project, and a subcommittee of this group was formed.

William A. Hyland, M.D., Grand Rapids, is Chairman of the MSMS Committee on Cancer Quackery; Past President of MSMS; Treasurer of MSMS; Member of Cancer Co-ordinating Committee.

The recommendations of the subcommittee are outlined here.

1. Each county medical society appoint a cancer committee to concern itself among other matters with the subject of cancer quackery; those county societies which do have a cancer committee should be urged to enlarge its scope to include a thorough knowledge of quackery and in cooperation with the national offices and local units of the American Cancer Society to keep the members of the Medical Society informed of the current progress in cancer diagnosis and treatment. Further, to fully inform the public through radio and newspaper articles, talks and discussions, dissemination of literature and by word of mouth, concerning the danger of departing from the type and form of treatment recommended by the physicians and hospitals in their area.

2. To further protect the patient, especially the advanced cancer patient, this Committee recommends that each hospital cancer committee review all advanced cancer patients through the usual methods with the attending physician or physicians, who in turn will make known to the patient or family the opinion of the group as to the type and stage of the disease and what to expect—and to detail every safeguard at his or their command against the wiles and enchantment of the charlatan and his emissaries.

The weakness of the profession through which the quack takes advantage is the very integrity of physicians, especially in advanced cancer. The admission by the profession that the cancer is advanced and there is very little to be done for the patient leaves the patient and family high and dry. This makes it easy for the unscrupulous quack to enter the picture at a price, with his generous promises, at a moment when the patient and family are at a low ebb mentally due to the shocking information.

The patient who has a good chance for recovery is not of too great concern as to the possibility of falling into the hands of the quack. It is the

advanced or terminal patient. However, the medical profession has much more to offer than the quack and in an honest manner—by a thorough explanation and not charging any great fee. In such cases, we can institute chemotherapy on a research and high moral basis. Patients will gladly co-operate with the thought in mind of helping others and possibly themselves, especially when they realize the cost to them or their family is small. The quack cannot compete with this type of treatment or procedure.

Much has been, and is being, done in research by the National Cancer Institute, American Cancer Society and others in chemotherapy. The aid of these institutions is readily available as are also the drugs they might recommend. Such help as this by the immediate medical resources which are known to the patient is the bulwark against the fraudulent practitioner.

3. The committee further recommends an editorial in THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY on quackery in cancer.

4. On the bimonthly cancer page in THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, there should be frequent reference to quackery.

5. County medical societies should release to the daily and weekly papers in their area approved medical material on cancer quackery.

6. This same material and knowledge should be made available for local radio and television stations.

Further, the committee suggested the Garland talk presented to the American Cancer Society recently be reprinted and distributed to all members of the Michigan State Medical Society if we are granted permission by the Medical Director of the American Cancer Society. It is called "The Pursuit of the Unorthodox."

Shortly after action by the Michigan State Medical Society in September, 1955, the American Medical Association in Boston in December the same year advocated that all state societies appoint committees or commissions to study quackery in addition to other work in the diagnosis of cancer.

Better Health for Mothers

By Palmer E. Sutton, M.D.



The broad objective of this Committee "To deal with all matters pertaining to maternal health" has evolved over the years to mean, more specifically, improvement in obstetric care and the elimination of all preventable maternal deaths.

This committee published a detailed historical review of its activities, including a comprehensive report of the first three years of a continuing survey of maternal deaths in Michigan, as a memorial number to Dr. Alex Campbell, in the February, 1955, JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY. In this issue appeared the names of the many dedicated members of our society and others who have been participants in the committee's program since its beginning in 1933. The information in this survey provides documented material for educational programs to the profession as well as to the lay public. The material has been disseminated through county, state and national meetings, in postgraduate conferences, and to the public by press, radio and television. The program involved in conducting this survey promotes greater liaison between the teaching profession in the two medical schools and the student and the practicing physician. The committee encourages and provides free consultation when requested, and works in close co-operation with the Consultant to the Maternal and Child Health, Division of the Michigan Department of Health. Also, the findings of the survey have been exhibited at the Medical Institute in Detroit, and to the Upper Peninsula Society in 1956. Currently, a Maternal Tissue Registry is being created to be housed at the University of Michigan Medical School for teaching and research purposes. Exchange of experiences and ideas with the members of other maternal health committees in other states have been conducted with profit to the members of both states.

The Maternal Health Committee believes that progress involves review, re-evaluation, and critical analysis, and the committee decries complacency. We believe that progress will be enhanced with continued co-operation between members of our society, component health departments, the general public, hospital administrators, and legislators. The chairman wishes to acknowledge again the great interest and ardor and industry and co-operation of the members of this committee.

PALMER E. SUTTON, M.D., Royal Oak, is Chairman of the MSMS Committee on Maternal Health, and Delegate to MSMS House of Delegates.

Diabetes Detection

By William H. LeFevre, M.D.



Many people suffering from diabetes in years past have developed complications as the result of damage to their blood vessels. Some of these people have lost their eyesight, others have developed serious heart disease, and still others kidney impairment. The discovery of insulin made it possible to control the disease more adequately, and as years have gone by evidence has piled up to show that the patient with properly controlled diabetes is less liable to develop serious complications. Many of our diabetic patients today have been under treatment for as long as thirty years without serious vascular complications, but in order to accomplish this it is important that the disease be discovered as early as possible.

About ten years ago, the American Diabetes Association, together with the United States Public Health Service, did tests on all of the people in one community, looking for persons having diabetes. They found a certain number of known diabetic patients who were under treatment, but they also found a number of people who were proven by laboratory methods to have the disease but were unaware of it. The data derived from this survey showed that at that time there were about one million diabetic persons in the United States and about a million other people who had diabetes but were unaware of the fact. It is these unknown diabetics who have the greatest chance to go through life without complications if they can be brought under treatment before symptoms develop.

As a result of this information, the American Diabetes Association through its state and local organizations developed a program of case finding. The third week of November each year is designated as "Diabetes Week" and during that time an educational program is put on through radio, television, newspapers and public talks aimed at educating the public on the symptoms of diabetes, the seriousness of allowing it to go untreated, and the methods of detecting it. Together with this educational program, an actual case finding program was also developed. People were requested to go to testing stations or to their doctor's office for a diabetic test. These programs were integrated with the state and local medical societies and the reports of tests were sent to the family physician, so designated by the person getting the test.

William H. LeFevre, M.D., Muskegon, is Chairman of the MSMS Committee on Diabetes Detection; MSMS Councilor for the 11th District; Member of the Executive Committee of The Council.

In Michigan the various units of the Michigan State Medical Society were requested to appoint diabetes detection committees in their localities. These committees were given help from the national organization and were asked to form their own program to fit in with the program of the American Diabetes Association. The methods used in the various localities varied widely. Testing stations had been set up in drugstores, hospitals, health centers, factories and business places. The Michigan Diabetes Association has also maintained a booth at the Michigan State Fair in Detroit as a part of this same program. The program has received great cooperation from all of our newspapers, radio stations and television stations. Last year the Junior Chamber of Commerce, in their various localities, assisted in the program and tested over 20,000 school children for diabetes.

The Michigan Diabetes Association with assistance from the American Diabetes Association acts as the planning organization and the diabetes detection committees from the various county societies in the state operate their own program separately. Some of these programs have been entirely educational and others have included testing stations. In the places where testing stations were used, the results of the tests were all sent to the family physicians who were to go on with the investigation.

We feel that the program has met with great success. Twenty years ago the person with newly discovered diabetes was usually one coming to the hospital unconscious in diabetic coma. Today the number of persons in diabetic coma admitted to our hospitals is only a small fraction of the number admitted twenty years ago. More and more, new diabetics are coming in for treatment to the doctors' offices with little or no symptoms, having been discovered at either a factory examination, life insurance examination or a periodic health appraisal. By bringing these people under treatment when the disease is in its early stages, a promise of a normal life span, without complications, can be given.

There are a few areas in the state where no such program has been held so far and it is hoped that as the success of the program is made more evident that the program will be expanded.

For Better Medical Service in Rural Michigan

By Brooker L. Masters, M.D.



The Committee on Rural Medical Service of the Michigan State Medical Society is charged with the function of enlarging and improving the medical services to the rural segment of the population. Because of the tremendous urbanization of the so-called "rural areas" in the past generation, this function is an increasingly broad one and, therefore, the scope of this committee touches on most of the aspects of medical practice in the state of Michigan.

After several years of exploring the subject, this committee on Rural Medical Service is convinced that to the majority of people medical care means simply: "Where can I get a doctor when I need one?" Most of the other aspects of service which the Michigan State Medical Society performs are of secondary importance to the average citizen. Therefore, one of the principal functions of this committee since 1953 has been to advise the Michigan M.D. Placement Program.

The M.D. Placement Program is administered by the Michigan Health Council. This organization has been responsible for developing a program which is a leader among all the states and one which has been studied by the AMA on several occasions for guidance in doctor placement services for all the states. The service is free both to the communities desiring a doctor and to the doctors seeking a place to practice. In this way a community needing a doctor lists that need with the Michigan Health Council. The community is aided in its efforts by forms developed specifically for this purpose; also, by contact work with a field man of the Health Council. This man makes on-the-spot analyses of many areas to determine if there is an actual need and, also, if the community is desirable enough to attract a doctor. From this listing, the doctors seeking a place to hang their shingles are directed to these communities.

The service does not end at this point. Follow-up checks are made to determine if the placement has worked out to the satisfaction of the community and the doctor. In this way, criteria are being developed by which definite opinions may be given to both parties much earlier in the placement proceedings.

At this time over 343 communities have been listed on the roster of the M.D. Placement Program. Over seventy-five doctors have been placed directly and over 105 by indirect placement. A doctor is considered a direct placement only if the Health Council has worked directly with him and the community is helping him set up practice there. All aspects of medical practice are covered, the general practitioner as well as all specialty fields. The public relations value of the program seems far beyond the actual cost of the service. It is definite evidence to the state of the Medical Society's efforts to improve medical service to every area. Furthermore, it gives an opportunity to industry and other interested groups to support this goal. At the present time The Upjohn Company is providing a large share of the financial cost of the M.D. Placement Program.

There are many other aspects to this Rural Medical Service program. Everyone is aware of the "sub-urbanization" of the rural areas. There is a social revolution in progress because of the city dweller wanting "space" and moving out to the farm or small communities to build his home and raise his family. Modern highways and automobiles make "commuting" a very desirable facet to modern life. The resulting growth in the small community creates changing concepts in every aspect of rural living. Public health, schools, taxes, law enforcement, housing, hospitals, government; all these, and more, are items of daily concern brought about by this trend. Not the least of these is the medical care for these areas. More and more it is a clear fact that to provide these services the areas must not only have more doctors but doctors who are full-time citizens as well.

Thus, the Rural Medical Service Committee finds itself considering problems such as health centers for the small community, increasing the flow of students into our medical schools from the rural areas so they will return to their home areas to practice, adequate health insurance programs for all, improvement in nursing homes and home nursing programs, and disaster plans for these communities. From this list it is obvious that the days when the doctor could remain in an ivory-tower and keep aloof from his community and

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civic responsibilities as a citizen are gone forever. Their communities earnestly need the counsel and intelligence of the medical profession to help guide them through these social changes.

Much remains to be done. The medical horizon is expanding by leaps and bounds. It is a challenge to organized medicine to do its proper share in bringing the newest and best advances to the citizen in all walks of life. Committees of the Michigan State Medical Society are doing just that. Their efforts prove that the "M.D." is a dedicated man—dedicated to the improvement and enrichment of the lives of all his fellow men. On such men as these the future rests.

Mechanics of the Doctor Draft

By Grover C. Penberthy, M.D.



The program of the Advisory Committee to the Selective Service System originated shortly after the outbreak of hostilities in Korea. The National Resources Advisory Committee was originally established at the suggestion of President Harry Truman by Mr. Stuart Symington, then Chairman of the National Security Resources Board, in August, 1950. The personnel of the National Resources Advisory Committee was forerunner of the activities of the National Advisory Committee which was founded with the passing by Congress of Public Law 779, "The Doctor's Draft Law." This Act called for the registration on October 16, 1950, of all physicians, dentists and veterinarians.

To assist the National Advisory Committee in its operation of Public Law 779, Committees were appointed in the various states and territories, numbering fifty-six. The chairman of the National Advisory Committee, Howard A. Rusk, M.D., along with the members of the National Advisory Committee selected and upon acceptance in October, 1950, appointed the Michigan Volunteer Advisory Committee, which included the author as Chairman; Doctor Albert E. Heustis, State Health Commissioner; and Doctor John O. Goodsell of Saginaw to represent the dental profession. Doctor Goodsell had formerly acted as a dental representative of the Procurement Committee during World War II. Doctor C. F. Clark, Dean of the Veterinary School, Michigan State University, was subsequently added to the Committee, as was Miss Elizabeth Moran, Director of Nurses, Henry Ford Hospital, Detroit. The personnel of the committee represented the practicing physician, the group interested in public health, nurses, dentists and veterinarians. Meetings of the state committee have been few due to the geographical location of the membership and limited budget appropriations. Many of the actions taken by the Committee have resulted from either telephone calls or communication by mail.

As part of the Act, the following was stipulated as a guide to the Committee members in the performance of their duties; namely:

"In the performance of their functions, the National Advisory Committee and the State and local volunteer advisory committees shall give appropriate consideration to the respective needs of the Armed Forces and of the civilian population for the services of medical, dental, and allied specialist personnel; and, in determining the medical, dental, and allied specialist personnel available to serve the needs of any community, such committees shall give appropriate consideration to the availability in such community of medical, dental, and allied specialist personnel who have not attained the fifty-first (now revised to forty-sixth) anniversary of their birth."

The present committee is called the Michigan State Advisory Committee of the National Advisory Committee to the Selective Service System, and has as its membership, all previously named except Doctor John O. Goodsell, who was replaced by Doctor F. J. Henry of Grand Rapids, at the request of Doctor Goodsell.

With the organization of the State Committee, the Chairman of the National Committee authorized formation of subcommittees throughout the State. The pattern set up was to have the local subcommittee membership composed of the immediate past president of the county society, the current president, and secretary. For much of the information requested relative to the essentiality or availability of physicians, the state committee has been dependent upon the advice and instructions of the members of the subcommittees. As regards dental activity, Doctor Goodsell and, subsequently, Doctor Henry carried on most of the work up to June, 1955, when it was deemed advisable to have the actual administrative work carried on by the staff in the headquarters.

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A telegraphed request outlined a pattern or procedure, as follows:

"In view of the Presidential proclamation calling for registration on 16 October 1950 of physicians, dentists and veterinarians, it is imperative that organization of the State Committee and of the necessary subcommittees be undertaken immediately. The responsibilities of your committee are:

1. To establish and maintain liaison with your State Director of Selective Service.

2. To advise the Selective Service System concerning the classification of individual members of these health professions who are subject to classification by Selective Service Boards.

3. To be responsible for carrying out within the State, policies established by the National Advisory Committee."

In a subsequent telegraph request, the following pertains to interns and residents:

"In establishing the essentiality of your interns and residents and other essential special registrants who are registered in other states, you must present your evidence to the registrant's Selective Service Local Board and ask the co-operation of the Chairman of the Advisory Committee in that state to support your claim of essentiality. . . . Every state advisory committee chairman and his local committees are urged to support the Selective Service Local Boards involved, any essentiality attested by a chairman of the state advisory committee of the state, in which the registrant is essential to the National health safety and interest."

The headquarters of the Michigan State Advisory Committee were established at the headquarters of the Wayne County Medical Society in Detroit, space being contributed by the county society.

An administrative staff has been a part of the committee since early 1951. Early administrative activities were carried on under the guidance of Miss Else Kolhede, Executive Secretary of the Wayne County Medical Society, until March, 1951, when Mrs. Lucy Aitken came in to head the administrative activities. The volume of work increased so that the staff now consists of three civil service employes.

The Michigan State Advisory Committee is unique because in the mechanics which have been set up for it, the medical profession itself has a voice in determining whether or not a physician, dentist or veterinarian is essential to the health, welfare and interest of the community in which he practices. This committee does not procure doctors for the armed services, but is concerned with the one important factor; namely, determining availability or essentiality.

To learn the number of physicians that might be vulnerable under the "Doctor's Draft Law" and available for duty, a questionnaire was circulated to all physicians and dentists, which record is filed in the state committee headquarters.

A part of the questionnaire contained information relative to the four priorities set up in the Law. Priorities I and II include physicians, dentists and veterinarians who were either deferred during World War II for the purpose of obtaining their education or who actually obtained any or all of their education at the expense of the government. Except in the most extenuating circumstances, all physicians, dentists and veterinarians included in Priorities I and II have fulfilled their military obligation. Priority III includes those physicians, dentists and veterinarians not included in Priorities I and II and who have never served in the Armed forces. Priority III physicians, dentists and veterinarians are presently being called to active duty. Priority IV represents those physicians, dentists and veterinarians that have served on duty with the Armed Forces during or subsequent to World War II, and in the State of Michigan, number approximately 4,500 physicians, dentists and veterinarians.

With the information accumulated, the Committee has been responsible for making determinations in regard to physicians, dentists and veterinarians in residency training or postgraduate courses, members of faculties, those engaged in essential laboratory and clinical research, industrial physicians and dentists, the general practitioner, et cetera. With the information available, the Committee has been instrumental in obtaining deferments on the basis of essentiality for periods sufficient for the community and/or institutions to obtain replacements and make satisfactory adjustments.

The following figures represent the number of physicians, dentists and veterinarians who have been ordered for induction by the Selective Service System under the "Doctor's Draft Law":

	PRIORITY I	PRIORITY II	PRIORITY III
Physicians	170	49	160
Dentists	52	10	125
Veterinarians	2	0	0

Since 1950, approximately 869 reserve officers, who volunteered for their commissions without having been ordered for induction, have been called to duty by their respective branch of service.

The work of the committee has been made pleasant by the wholehearted support of the State Medical Society as well as the local county medical societies; and to all who have contributed to the successful operation of the Michigan State Advisory Committee, the gratitude of the committee is expressed.

Medical Students Learn Fundamentals of Economics and Ethics

By R. Wallace Teed, M.D.



A few years ago medical students were receiving little or no organized training in the fundamentals of economics and ethics, and it was recognized that some of medicine's problems were moral or ethical in character.

The MSMS therefore decided to appoint a committee to arrange a series of lectures on these subjects for presentation to the students in order to correct this deficiency at least in part. The committee believed that these discussions would bring about in these future physicians an awareness of their responsibilities as citizens, and that, as a result, medical public service and public relations would be improved.

For various reasons most of the lectures have been given to the senior classes, although Dr. John Rodger of Bellaire has spoken to the sophomores on the subject of "Rural Practice." It has been the feeling of the committee that students should begin consideration of ethical matters in the sophomore and junior years, but apparently the curriculum will hold no more at these levels.

At the University of Michigan the seniors are given one hour per week (Wednesday at 1:30) for talks by any speaker they select, and attendance is voluntary. Hence MSMS must compete with other speakers both local and national and for an audience by presenting interesting speakers and interesting topics. The vice-president of the class acts as manager of the program and the chairman of the committee works with this man in developing the schedule.

During the year 1955-56 some nineteen talks were presented. The subject "General Practice In The Small Community" was covered for the sophomores by Dr. John Rodger and for the seniors by Dr. John S. DeTar of Milan. Both stressed that this type of practice can be satisfying from many points of view. A very acceptable talk on "Starting Practice" was given by Dr. Warren Mullen who began practice in Pentwater about three years ago, and who also described the satisfactions of small town practice. Mr. Eugene Wiard, Executive Secretary of the Michigan Health Council, described the operation of the "M.D. Placement Program" in Michigan, pointing out the great assistance which this activity can bring to the physician seeking a desirable location for practice. Captain Brunk of the State Selective Service Administration reviewed the provisions of the Doctor Draft Law and its application to physicians.

The chairman spoke on "Medical Public Relations" stressing the importance of personal mortality factors in developing good public relations at the most important level of all—the office. Mr. Hugh Brenneman, Public Relations Counsel of MSMS, and his associate, Mr. Dewitt Brewer, discussed the broader aspects of the MSMS Public Relations program and the importance of each physician in this program.

Dr. George Coan of Wyandotte, a member of the Wayne County Ethics Committee, spoke on the "AMA Code of Ethics," illustrating salient points with actual cases which had come before his committee. Dr. James Blodgett of Detroit spoke on "Self-Policing of the Medical Profession," describing the activity of the Surgical Audit Society and the Hospital Medical Audit and Tissue Committees. The entire Ethics Committee of the Washtenaw County Medical Society held an open session for the students, at which several applicants for membership in the Society were given an indoctrination on ethical matters. This indoctrination is one of the requirements for membership in the Society.

The "Relation of the Physician to Fellow Practitioners And Substandard Healers" was discussed ably by Dr. Milton R. Weed of Detroit, who pointed out how pitfalls in this area can be avoided by adherence to recognized principles. One of the highlights of the series was a talk by Dr. Jackson Livesay of Flint on "Provincialism and Economic Royalism in Medicine." It is a classic.

The "History, Philosophy, and Proper Utilization of Voluntary Health Insurance" was discussed by the long-time secretary of MSMS, Dr. Fernald Foster of Bay City, whose broad knowledge of the subject stems from official contact with Michigan Medical Service from its incipiency. The other "Approaches to the Problem of Health Coverage" were discussed by Mr. Jay Ketchum, Executive Vice President of Michigan

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Medical Service. Both of these talks were considered important by the committee and were well received by the students. Dr. William Bromme of Detroit spoke on "Medical Problems of Veterans."

"The Relation of the Physician to the Legislature" was well handled by Dr. Lawrence Drolett of Lansing, honored long-time chairman of MSMS Legislative Committee. The practical aspects of "The Relation of the Physician to the County Health Department" were discussed by Dr. Hugh Robins, chief medical officer of the Calhoun County Health Department of Battle Creek.

On the occasion of a bad storm when the scheduled speaker could not be present the chairman filled in with a talk on "Adequate Office Records." Dr. Arch Walls of Detroit, President of MSMS, spoke on "The Development of a Fee Schedule."

The committee recognizes that some of this material may seem a little theoretical to many students, but believes that it has practical value, and hopes that when the student graduates and engages in practice he will be better able to meet the various problems covered because of having heard them discussed.

The committee does not believe that it has the full answer to the problem at hand since it is a relatively new field and there have been no guideposts. However, the experience has been highly educational as far as the committee is concerned, and we believe our efforts have improved from year to year. We hope to do better in the future.

Using Radio to Tell the Story of Scientific Progress

By Harry A. Towsley, M.D.



It is the profound belief of the Michigan State Medical Society that problems relating to individual and community health, as affected by new methods of diagnosis, treatment, and prevention of morbidity and mortality, should be well understood by the lay public. It is further recognized that a public well informed on health matters is a far healthier public than one that does not recognize the impending dangers to health and does not seek medical advice until the disease processes are far advanced, difficult and costly to treat, and often impossible to cure.

The development of radio created an ideal medium for the dissemination of such knowledge. By the middle 1920's programs in this field were "on the air" to Michigan listeners, originating from a few county medical societies and from the University of Michigan Medical School faculty.

In 1931 the House of Delegates of the Michigan State Medical Society adopted a resolution submitted by Dr. William S. Stapleton of Detroit, "to authorize the Public Health Education Committee to institute and conduct statewide radio broadcasts on popular medical subjects for public information." Since then, the Scientific Radio Committee has developed and is charged with the responsibility of providing a series of approximately forty weekly broadcasts annually.

Members of the Michigan State Medical Society, the medical faculties of Wayne State University College of Medicine and the University of Michigan Medical School provide the talent for these fifteen-minute programs, which are broadcast by some ten radio stations throughout the state as a public service. The broadcasting service of the University of Michigan, under the direction of Professor Waldo Abbott, has cooperated with the Society in this venture by making recordings of each talk, which are distributed to radio stations wishing to make this service available to their listening public. In addition, printed copies of each discussion are available for the asking from Radio Station WUOM, University of Michigan. From 500 to 1,500 listeners request such printed material each year.

These recordings are available in the Public Relations Library of the Michigan State Medical Society for rebroadcast or for the use of any member of the Society. The subject matter covers a wide range. It touches on practically every phase of medicine. In so far as possible, during the past year talks were arranged to be presented during national, state, or local health months or weeks; such as, cancer in cancer month, heart disease in heart month, et cetera.

Future planning in this educational endeavor includes school health programs for the radio-minded classrooms in our public schools and broader distribution of the current programs.

This committee is deeply indebted to the many doctors who have made their time available for preparation and comprehensive presentation. In

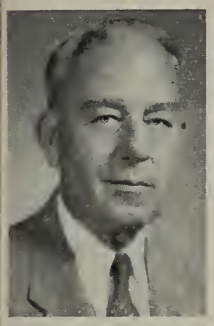
HARRY A. TOWSLEY, M.D., Ann Arbor, is Chairman of the MSMS Scientific Radio Committee; Professor of Pediatrics and Communicable Diseases; and Associate Director of the Department of Postgraduate Medicine, University of Michigan.

particular, the Society is extremely grateful to the radio stations which have carried these health messages for the past three decades.

It is the firm conviction of the Scientific Radio Committee of the Michigan State Medical Society that public awareness of medical progress in diagnostic, therapeutic, and preventive fields will play a large part in our combined efforts to better individual health and prevent costly illness to both the individual and the community.

To Preserve a Great Heritage

By O. O. Beck, M.D.



On historic and beautiful Mackinac Island, in the northwestern portion of Lake Huron, Michigan doctors of medicine have built a memorial to William Beaumont, M.D. It is a reconstruction of the original American Fur Trading Company retail store, adjacent to old Fort Michilimackinac, where Alexis St. Martin was gravely wounded in an accidental shooting which left a permanent opening into his stomach.

Sheer coincidence was a major factor in making Dr. Beaumont America's pioneer physiologist, since the accident took place almost within earshot of the only doctor in the great wilderness of the Northwest Territory.

In this memorial building Dr. Beaumont first saw his famous patient, whom he considered to be fatally wounded. After a long convalescence, however, Alexis St. Martin recovered his health, but Dr. Beaumont did not stop after fulfilling his obligation to the individual. He perceived an opportunity to benefit all humanity by adding to man's medical knowledge. True to his profession, Dr. Beaumont grasped that opportunity and pursued it with the patience and zeal characteristic of all men and women who devote their lives to research in the interest of medical progress. Makeshift equipment and backwoods surroundings far different even from the relatively crude laboratories of his day did not discourage him.

The Beaumont Memorial building was completed in July, 1954. Since that time, during the summer months the memorial has been open to the public.

The furnishing of the interior is in the development phase, and is at the present time incomplete. It is difficult to obtain the necessary material, such as merchandise, containers, flasks, et cetera, which were in use during the nineteenth century. Furthermore our limited resources will of necessity prolong its completion. However, a determined effort is being made by the MSMS Beaumont Memorial Committee.

Many of those who have visited the memorial are gracious in their praise of the medical profession for preserving an important medical and historic landmark for posterity.

Otto O. Beck, M.D., Birmingham, is Chairman of the Beaumont Memorial Committee; Past President of MSMS; Past Chairman of The Council of MSMS; Trustee of Michigan Hospital Service.

Developing the Medical Associates Program

By Ralph H. Pino, M.D.



Like most other states today, Michigan was—and is—faced with a basic problem in the fields of medicine and health: Extension of the best medical care to the maximum number of people.

In undertaking its responsibility to insure the best in medical care for the people of Michigan, utilizing the constant progress in the field of medicine, the Michigan State Medical Society studied this problem thoroughly and over a period of years developed a project for training and recruitment of medical associates as a primary aid in its solution.

The Cause

Several factors contributed to the problem. While there was unquestionably a need for more doctors of medicine, the so-called "shortage" of M.D.'s in Michigan appeared to be in greater part a question of distribution and of maximum use of the doctors available.

There also were other forces to be considered:

1. The people had become much more conscious of personal health and sought to take advantage of recent medical progress. Advances in curing, controlling or curbing the crippling effects of such diseases as diabetes, pneumonia,

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heart ailments, tuberculosis, and a host of other illnesses, had been widely publicized. Through educational campaigns, the public had become aware of modern medical treatment and more and more were making use of regular care by a doctor of medicine.

2. Since World War II, there had been a great wave of hospital and clinic construction, providing the facilities needed to care for the sick and handicapped. However, the supply of personnel to man these institutions had not kept up with construction.

3. With the great technical advances in medicine, new vocations had been born and become increasingly important. For example, occupational therapists, physical therapists, x-ray technicians, mental health aides, hygienists in various categories, and other non-M.D.'s upon whom the doctor of medicine necessarily relied, assumed important places in health and medical care. The role played by laboratory technicians, medical technologists, and other technical personnel received greater emphasis with each advance in diagnosis and therapy.

4. Doctors of medicine themselves began concentrating on new specialties and subspecialties. Each new specialty increased the need for trained nonmedical personnel.

In short, medicine had become a complex science. If Michigan was to have the medical care its people needed and was to benefit by the rapid progress in medicine, then the hospitals, the clinics, the laboratories, the physicians' offices —and the doctors of medicine who were responsible for these facilities—needed help in the form of personnel, well-trained and in generous quantity.

Plan of Action

To meet the problem, the Michigan State Medical Society put into operation a manifold project. The program is now more than eight years old, has reached maturity, and continues to grow and to serve!

It was basic, of course, that MSMS would work toward increasing the supply of doctors of medicine. This side of the problem has been attacked from many points. Many agencies and organizations were determined to increase the supply of competent, well-trained M.D.'s. Results have been good—but must be better!

However, in the beginning, MSMS stood almost alone, not only in recognizing the need for a coordinated approach to securing medical *associates,* but in actually doing something about it. As a matter of fact, the term "medical associates" as a field embracing many vocations on the periphery of medical practice, originated in Michigan.

Recruitment. — In undertaking a program, MSMS was not faced with a simple task of recruitment. For example, the best-conceived recruitment effort would be worthless without facilities to train the people who were induced to enter the new vocations. Then there was a subsidiary problem of training doctors of medicine themselves to make use of medical associates. A whole new philosophy had to be "sold" to medical educators, doctors of medicine, and to vocational counselors, before it was worth while to start mass recruitment activity in this new "medical associates" field.

Actual Need

Before jumping into its campaign with both feet, the Michigan State Medical Society was determined to find out the actual need for medical associates personnel. In collaboration and with the co-operation of a number of health agencies and professional organizations, a survey was made which gave factual proof of the extensive opportunities available in medical associates careers.

With similar findings in hand, the Michigan State Medical Society put into effect its comprehensive plan of action, attacking on several fronts.

Here are the steps which were determined as necessary for a successful long-range campaign.

Methods of Approach

To Doctors of Medicine.—An early step was to broadcast the medical associates story to the doctors of Michigan. This was not a matter of merely pointing out the need but a determined effort to "sell" doctors of medicine on the use of medical associates to increase their own efficiency.

An eye-catching and fact-filled recruitment brochure, designed to interest young people in entering a medical associates career, was first distributed to M.D.'s as a medium for awakening them to the possibilities from the doctor's viewpoint.

Several follow-ups were used to stress to the doctor the idea that by using medical associates he could care for more patients and yet give an equal amount of care in each case *with less cost to those he served.* This message was carried to MSMS members in the Society's JOURNAL, and through presentations at the Annual Session, in the House of Delegates, and at state and regional public relations conferences.

To Educators.—From the beginning, it was obvious that unless there were facilities in which to train recruits it would be of little use to undertake an intensive effort to interest young people in entering a medical associates career. While there were facilities in Michigan for training personnel in a number of the older-established vocations in the medical associates field, these in many instances were limited. In addition, several new categories of medical associates had come into their own only after World War II, and some were so modern that schools and colleges were not prepared to offer courses, particularly in technical areas of study.

A survey of courses offered in Michigan indi-

cated that a prime attack on this front was an immediate necessity. Through a variety of educational groups and established educational associations, MSMS committees established liaison with the heads of Michigan's colleges and universities and convinced these educators of the urgent need for training courses for medical associates.

The response was immediate. It was possible to inaugurate some courses at once, while others required more planning; but, nevertheless, educational facilities became increasingly available. In one, two, and four-year courses, young people were offered opportunities for career training as medical associates through new classes and/or study sequences established in the curricula at University of Michigan, Michigan State University, Wayne University, Hillsdale College, Highland Park Junior College, and other state and private schools.

The need for training additional medical associates was a factor in persuading the Governor and the Michigan Legislature to expand facilities at University of Michigan Medical School (Ann Arbor) and Wayne State University College of Medicine (Detroit).

Where it was not possible to set up courses in established schools and colleges, special schools in certain technical skills were arranged. MSMS worked with the Michigan Department of Public Instruction to make sure that these special schools were qualified to be licensed and certified for GI training. These schools were established to train personnel in such fields as medical technology and x-ray operation, where modern laboratories and costly equipment were essential. Such facilities in regular schools were for the most part adequate only to handle medical students and others enrolled in one-year or graduate courses leading to a degree.

Interest in these vocational courses continues. In a number of cities, night courses within the adult education department have been set up for secretaries wishing to become specialists in medical work or aiming for a career as medical office staff members.

To Youth.—With the groundwork laid, MSMS was ready to use every avenue possible to attract young people—and in the case of practical nurses, older women—into entering vocations within the general classification of "medical associates."

The basic tool for dramatizing the recruitment campaign was a comprehensive and handsomely-illustrated brochure entitled "In Planning Your Career—Consider the Opportunities and Vast Fields Open to You as a Medical Associate." This brochure, first distributed to doctors of medicine, was next sent to educational personnel and vocational counselors. It became the medical associates "bible." It has been distributed far beyond the borders of Michigan; in Wisconsin, for example, the State Medical Society reproduced it word for word, picture by picture.

This booklet contained thirty pages packed with information, plus a large chart inserted at the back which blocked out each medical associate field in detail, including salaries, training facilities, professional societies interested in each field, and a storehouse of supporting information which was not to be found in any other single publication.

Various media of communication ultimately were used. Speakers bureaus were set up for appearances before high school and PTA groups, and at the annual "Career Days" which have become popular in Michigan high schools. A special series of ten five-minute radio broadcasts was prepared, recorded, and broadcast over thirty-eight Michigan radio stations. These broadcasts have been repeated on an annual basis in several instances. The Woman's Auxiliary to the Michigan State Medical Society became interested in recruitment. The 2,500 members of the Auxiliary formed speakers bureaus, issued pamphlets, and set up scholarships for young persons interested in entering the field.

Hospitals and doctors' offices were supplied with information, and young people were urged to consult with their family doctors or local hospital. The opportunities were outlined and "glamorized" in a number of publications with national circulation, including *The Reader's Digest, Parade Magazine, Medical Economics,* and *The New York Times.* Every effort was made to publicize the career possibilities in local newspapers.

Help from Other Sources

Eventually the Michigan Health Council, an organization closely allied with MSMS, was drawn into the campaign.

One of the early steps was to organize the Michigan State Medical Assistants Society, with component chapters in several counties throughout the state. This organization of secretaries and other assistants who work for doctors of medicine in their offices and hospitals has grown in strength.

In 1954, one full day preceding the Michigan Rural Health Conference was devoted exclusively to career possibilities in the medical associates field. This was the first such statewide meeting ever held.

A thirteen-and-one-half-minute color motion picture was produced on "Medical Associates" in 1954. This has been screened before large audiences at "career days" and at meetings of PTA groups, women's clubs, and civic associations. It was tailored expressly for adaptation to television, and shown over the principal Michigan TV stations.

Latest development is a pilot project in Michigan's Ingham County (Lansing), set up by the Michigan Health Council, to place medical associates in openings found in doctor's offices, hospitals, and public health agencies.

Results

Results of this effort already have been spectacular, but the full effects cannot be evaluated for several years to come. However, results can be briefly summarized:

1. Doctors of medicine in Michigan are able to give more efficient and more effective service, taking care of more patients, through using medical associates in many ways. Physicians have gained more "hands" to serve the increasing many.

2. A larger supply of medical associates is being turned out in Michigan because young people have been attracted to the field, and because vocational counselors are guiding qualified persons to careers as medical associates.

3. Educational facilities for medical associates have been expanded tremendously, and will be augmented further.

4. Medical associates as an overall field has been established as a new "profession," primarily through the efforts of MSMS. The impact of the intensive Michigan campaign has highlighted this contemporary career opportunity throughout the nation as a whole.

Benefits of this project will continue far into the future, across the nation.

The Women Work

By Mrs. Delbert M. MacGregor



The Woman's Auxiliary to the Michigan State Medical Society this year held its Thirtieth Annual Meeting, at which time reports given noted the outstanding progress made by this group since its organization with the primary purpose—"through its members, to explain the objectives of the medical profession to lay organizations interested in health education, and to promote acquaintanceship among physicians' families and thus foster better fellowship."

The Auxiliary has 3059 members with fifty organized constituent auxiliaries. As it has grown, so has its program and its activities. However, the auxiliary is still paramountly interested in a program which highlights EDUCATION—education of its members and in turn of the public by sharing Medicine's message with other organizations in which we hold membership. Informed auxiliary members are in a position to assist the medical profession in distributing authentic information relative to health. The auxiliary is still interested too, in a program which highlights SERVICE—service to our communities by extending our contacts into other organizations, through active membership. The members are anxious for everyone to realize that a doctor's wife is interested in her community and its activities; that she assumes her share, and more, of responsibility, which will make the community a better place in which to live.

The thirtieth year of the Woman's Auxiliary has been marked by many notable achievements and mention of a few may better illustrate the workings of the auxiliary.

A contribution of $3,200.00 was made to the American Medical Education Foundation—an organization among the "medical family" to aid, by voluntary financial support, the eighty-two medical schools in the country. In addition, the Michigan auxiliary was among the "top ten" in the eighty Dimes Campaign conducted during National Medical Education week in April.

Nurse Recruitment takes top-billing with all our auxiliaries. Over $11,300.00 was spent for recruitment activities—namely Future Nurse Clubs; scholarships and loans to nurses and medical students.

There is great interest in the promotion of *Today's Health,* the official magazine of the American Medical Association. Eighty-eight per cent of the state quota was reached this past year, with fourteen auxiliaries obtaining 100 per cent or better. Mason County climbed to the almost unbelievable heights of 1922 per cent, for which it received second prize nationally in the 1955-56 subscription contest.

The Annual Tuberculosis Speaking Contest, sponsored jointly by the Michigan Tuberculosis Association and the Woman's Auxiliary to the MSMS, is a project peculiar to Michigan. A total 3,465 students from eighty-seven schools scattered over forty counties participated with 160 talks submitted for state judging. Students spoke to school and community audiences totaling about 13,115; with about forty local radio programs arranged by schools or local county auxiliaries.

Each auxilitary is definitely aware of the importance of public relations and contributes effectively. It would be ideal if each project could be

MRS. DELBERT M. MACGREGOR, Flint, is immediate Past President of the Woman's Auxiliary to the Michigan State Medical Society; Regional Chairman of Civil Defense for the AMA Woman's Auxiliary; and Past President of the Woman's Auxiliary to the Genesee County Medical Society.

mentioned, but the list is a long one; with assistance given at Health Days and Fairs, to Health Councils, to schools on various phases of a health program, to hospitals and hospital auxiliaries, and to other health agencies and health programs —to mention only a few. A survey of the various volunteer services—such as Red Cross, P.T.A., Girl and Boy Scouts, cancer and polio drives, et cetera—given by doctors' wives in their respective communities revealed an average effort, by conservative estimate of thirty-five hours per member per month.

Emphasis was placed on a Public Relations meeting to which guests from other organizations and/or the public at large was invited. An outstanding program held by the Woman's Auxiliary to the Saginaw County Medical Society was an open meeting on "Doctor-Patient Relationship"—a panel discussion featuring an attorney as moderator. The medical society was represented by the president, a surgeon, and a general practitioner. Representing the general public were a news feature writer and a personnel manager. A lively and interesting discussion developed on such subjects as doctors' fees, willingness to make house calls, et cetera.

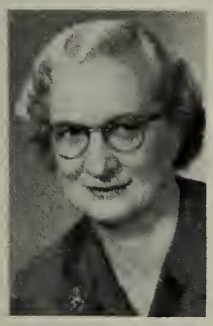
The auxiliaries have responded effectively to any request of the MSMS in regard to legislation. The members have worked diligently in the past on a "Get-Out-the-Vote" campaign and this same enthusiasm will again be evidenced this fall. Increased interest in Civil Defense and mental health has resulted in many groups having meetings devoted to these subjects.

One of the newest projects, suggested by our national auxiliary, is that of Home, Traffic, and Water Safety. The "GEMS" or "Good Emergency Mother Substitutes"—a baby sitting course —is an interesting phase of this project.

There are many more accomplishments, but suffice to say that Michigan has earned an enviable record among the state auxiliaries; and we in Michigan are proud of that record. The Woman's Auxiliary is grateful for all the assistance given to it by the Michigan State Medical Society and, in turn, stands ready at all times to help further the aims, objectives, and purposes of its parent organization.

The Medical Assistant Helps

By Hallie Cummins, R.R.L.



The courtesy and efficiency of a medical doctor's office personnel are elements which enhance his service to the public.

Organized in Michigan in 1949, the Michigan State Medical Assistants Society, made up of employes of physicians, hospitals and laboratories, exists to inspire and train its members to give the honest, loyal and capable service every doctor needs in his office.

The Society is sponsored by the Michigan State Medical Society, and its Advisory Committee is composed of a group of doctors appointed by that organization. The Society is one of the largest and most active in the country, with 800 members in sixteen component societies. Representatives from Michigan contributed their experience at an organizational meeting in Kansas City in November, 1955, of the American Association of Medical Assistants.

Highland Park Junior College, Hillsdale College, and Ferris Institute are pioneering in the training of medical assistants. They have established special courses for this purpose.

To assist the untrained medical assistant perform the multitude of duties necessary to the efficiently run office, the Michigan State Medical Assistants Society provides a wide variety of medical subjects, as well as medical ethics and public relations, at its annual convention and at local meetings. Two conferences are held annually to assist local officers and chairmen in program planning.

Typical of its progressive activities, the Ingham County Medical Assistants Society has conducted a successful pilot study of a placement bureau for medical assistants. A brochure on this project will be published for the guidance of other groups.

More and more doctors and medical assistants are becoming aware of the value of the Society, and the steady progress made in the past is a prediction of what may be expected in the future.

Hallie Cummins, R.R.L., Caro, is President of the Michigan State Medical Assistants Society; Member of the American Association of Medical Record Librarians; Past President of Saginaw County Medical Assistants Society; and Secretary to the Superintendent of Caro State Hospital.

The Versatile Versenes

Their Use in Malignancy

Louis J. Bailey, M.D., F.A.C.P.
Detroit, Michigan

THE PURPOSE of this presentation is to describe a theory which occurred to the author in the fall of 1955, when he was confronted with a case of advanced lymphoblastoma. It was tested and appeared to be supported by experimental evidence and by clinical experience.

The theory concerned the possibility that enzymes might be intimately connected with the high rate of metabolism of malignant tissue and that these enzymes might be interferred with by a drug capable of removing the trace elements upon which enzymatic action is frequently if not always dependent. The highly successful work carried out by Drs. Norman E. Clarke and Robert E. Mosher[3] in the investigation of the Versenes brought this type of agent to mind as being possibly applicable in the above connection.

The investigation was begun in October, 1955, and in a report not yet submitted[1], the writer describes the spectra of trace metals recovered from the urine of a patient with lymphoblastoma. This patient received calcium versenate.

To clarify the nomenclature, Versene is the trade mark name of the drug for which the generic name edathamil[2] has been adopted. The Versenes are so-called chelating agents which have the property of holding multivalent ions in relatively stable and nonreactive combinations.

Versene, or ethylenediaminetetraacetic acid (EDTA), is a synthetic amino acid having the ability to form complex salts with polyvalent metallic ions in aqueous solution. These complexes are characterized by their solubility in neutral and alkaline solutions and by the fact that they are unusually stable (i.e., only slightly ionized). As might be expected, the relative stability of the different metallic salts of EDTA will vary from metal to metal and presumably are controlled by differences in size, charge and nature of the respective ions.

The process by which the complex salts of EDTA are formed is called "chelation." The word comes from the Greek "chela" which means "claw." The process of chelation involves a claw-like action in that a molecule containing two or more chemically reactive groups can react with an atom or ion with two or more of these groups to form a ring-like structure. The resulting "chelate" is in equilibrium in the solution with the starting materials in proportions which are under the law of mass action.

Compounds of EDTA, which we will call Versene, have been used in many ways. Clarke and his co-workers[3] used the sodium compound in the treatment of urinary calculi and in the investigation of atherosclerosis. They have been used in industry as scale removers, as water softeners, as preservatives. They have been used in the treatment of chrome ulcers of the skin and for the removal of corneal calcium. They have been used in agriculture, in the food and beverage industry and for increasing the detergency of soap.[4]

We were encouraged to investigate the case referred to above because we knew that malignant cells are more susceptible to x-ray damage than normal cells and one theory of x-ray effectiveness is in possible enzyme inhibition. Might they not also be susceptible to chemical damage to accomplish the same type of inhibition?

We already knew that normal cells were not damaged by the doses of Versene used clinically by Clarke et al[3] and which almost exactly approximated the doses subsequently published by the Council on Pharmacy and Chemistry of the AMA.[6]

It remained to demonstrate whether metals calculated to be intimately involved in critical enzyme systems could be mobilized by calcium versenate in a case of malignancy. Such proved to be true as will appear in a separate report; but it will suffice to say here that large quantities of zinc and manganese were recovered from the urine even after treatment had continued for several days.

Slight clinical improvement also took place and it was especially noted that a greatly enlarged liver receded rapidly. This assumed sig-

From the Department of Research, Providence Hospital.

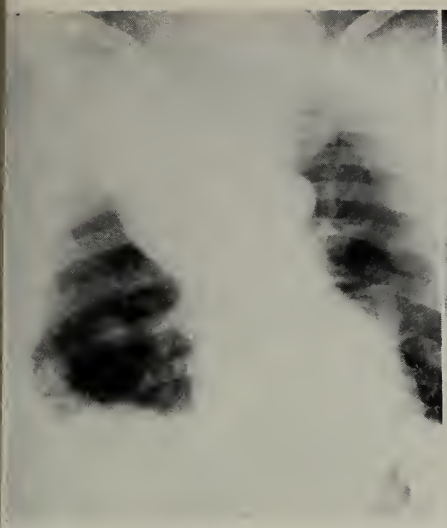


Fig. 1.

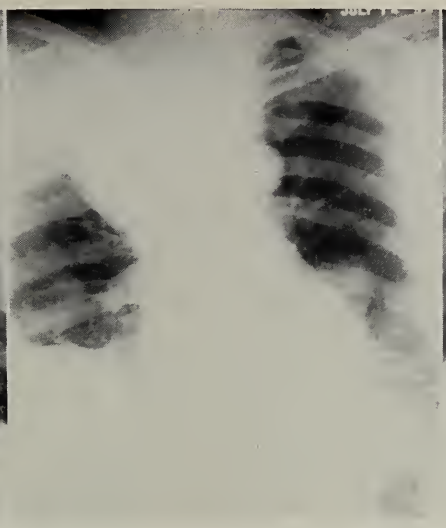


Fig. 2.

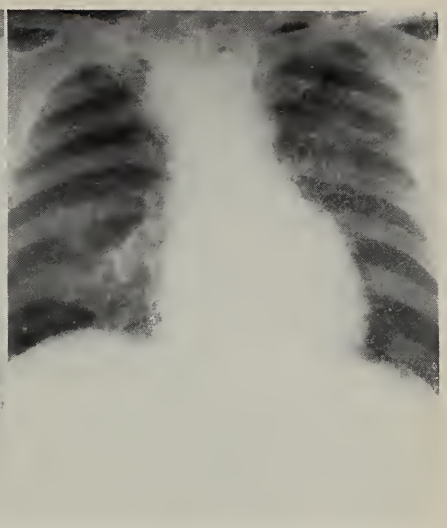


Fig. 3.

nificance when it became known that the liver contains 32 mg. of zinc and 2 mg. of manganese;[7] but it was the more so in view of the fact that our patient excreted much more manganese relatively than zinc and that the liver is said to be very active in manganese metabolism.[8] There is evidence that both zinc and manganese are necessary in many different enzyme systems.[7-12]

In June, 1956, another opportunity came to observe the effects of the drug on a metastatic tumor of the lung. This time the tri-sodium salt* was used:

Case Report

J. S., a forty-six-year-old man, was admitted to Providence Hospital on June 15, 1956, in extreme distress due to respiratory embarrassment.

The history indicated that the left leg had been removed in August, 1955, due to a fibromyxosarcoma. There were signs of superior caval compression and extreme difficulty of respiration even while in oxygen. A mass was present in the right upper posterior chest. Subsequent x-ray examination (Fig. 1) disclosed a number of metastatic nodules in each lung.

The first thirteen days of his treatment included the administration of cortisone, June 17-29, inclusive. From June 19 to July 7, he received 5.0 gm. sodium versenate in 5 per cent dextrose in water, in daily doses so spaced that, with rest periods, fourteen doses were given.

Roentgen therapy extended from June 15 to July 13 with a total dosage, measured in air, of 2800 roentgens to each hemithorax and 1050 roentgens to each cervical and supraclavicular region.

He left the hospital in good clinical condition but without much change in the x-ray appearance of the chest (Fig. 1). He remained relatively symptom free and on September 4 it was found on re-examination that the large mass in the right upper chest had undergone remarkable resolution and that the metastatic nodules were almost completely gone. (Fig. 3.)

These two experiences, the one showing a high rate of excretion of trace metals calculated to be associated with important enzyme systems, and the other showing an unexpectedly good clinical response on the part of a usually x-ray-insensitive growth, encouraged us to believe that the theory upon which Versene was used might be reasonable.

All the agents which damage neoplastic cells while leaving normal cells relatively unaffected must do so by virtue of an effect on some fundamental process which might reasonably be enzymatic. Neoplastic cells must in some way be more susceptible to damage than normal cells in order that both be exposed to the same damaging agent yet only one be materially affected.

We chose to assume that the high rate of metabolism of malignant cells was supported either by a high concentration of normal cellular enzymes or by more specialized and therefore more vulnerable catalysts. Conventional therapy, such as x-ray, might result in an intracellular change making the elements within the cells open to further attack. A chelator might then remove necessary metals so that the original constitution of the cells could not be regained.

Whether we have attained this objective we do not know. The concept seems to be justified by the results so far observed.

The literature contains certain reports and warnings issued in other contexts which lend

*The tri-sodium versenate was kindly supplied by Mr. Ralph L. Sherman, Department of Research and Development, Sherman Laboratories, Detroit, Michigan.

credence to the idea that the salts and chelates of Versene might find application in the study and treatment of malignancies.

Thus, Versene was reported as being antimitotic,[13] by interferring with the gelation which precedes formation of the spindle. Warnings have been issued that it might take metals out of the body other than those which it was intended to remove as, for instance, when the primary disease is lead poisoning;[14,15] but in the removal of lead, which is the chief indication for the use of this drug,[6,16-18] serum calcium, copper, sodium and magnesium are not disturbed.[14] (Our first patient did not show an increased excretion of magnesium.)

Fatal poisonings have been reported[19] with the use of this drug, the lesions being largely in the kidneys; but the doses given were very large.

The proper dose[6] is described as follows when the calcium chelate is used for the treatment of lead poisoning:

> A 3 per cent solution in isotonic sodium chloride solution or 5 per cent dextrose in water, the dose being .17 gram per hour per 4.5 kg. (10 lbs.); .33 gram per day; or 1.67 gram per week.

We have followed a similar schedule for either the calcium or sodium compound, usually adhering closely to 1 gram for each thirty pounds of body weight; but the sodium compound must be given at a slower rate than is indicated. It is apparent from the above figures that the calcium chelate could be taken at a dose of approximately 5 grams in two hours, but it will be found that the sodium salt will be uncomfortable if taken at that rate. It may even be dangerous, due to hypocalcemia. Administration will have to take about four hours. Furthermore, while the calcium compound can be given in the concentration indicated, it will be found more practical to use a 1 per cent solution, and for the sodium compound ½ per cent solution is best.

Our investigations of Versene are continuing. If subsequent observations confirm these early experiences, this drug will take its place beside the other chemical substances being investigated for the treatment of malignant disease and will warrant investigation by others.

Summary

The trace metal excretion caused by calcium versenate in a patient with lymphoblastoma was known to be high in zinc and manganese.

Since this was thought to be related to enzymatic activity and since x-ray therapy is considered to act in part by inactivation of enzymes, a patient with metastatic fibromyxosarcoma was treated with combined sodium versenate and x-ray with an unusually good resolution of the tumor.

Versene may act synergistically with x-ray by removing trace metals which are temporarily set free by x-ray inactivation of intracellular enzymes.

Acknowledgment

Grateful acknowledgment is made of the technical assistance and advice of Robert E. Mosher, Ph.D., Providence Hospital, Research Department.

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10 Peterboro Street

Value of Respirometer Studies on a General Medical Service

By Julian M. Guidot, M.D.
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CHRONIC respiratory diseases are encountered frequently in any general hospital population. Emphysema, a destructive disease of the lung parenchyma, usually secondary to chronic bronchial obstruction, is particularly common. The insidious onset and slow progression of the disease account for the usual absence of dramatic episodes that prompt the institution of proper treatment. The patient adjusts to increasing loss of his pulmonary reserve function so gradually that only acute complications, such as upper respiratory infections, pneumonia, or a near terminal state, make him seek medical care. It is in these cases that respirometer studies are helpful.

The respiratory function of the lung may be divided into three parts: (1) ventilation, (2) diffusion of gases across alveolar capillary membranes, and (3) the circulation of blood through the alveolar capillaries. Ventilation includes the movement of air in and out of the lungs and also the distribution of air to various parts of the lungs. Diseases producing ventilatory disturbances are common and when long persistent they may lead to disturbances of diffusion and circulation as well.

Chronic bronchial obstruction by producing hyperinflation contributes to the destruction of alveolar membranes which is an integral part of pulmonary emphysema. Increases in the physiologic dead space may also be attributed to bronchial obstruction. A large volume of each breath may enter into large emphysematous areas of the lungs which have little blood supply and, conversely, a large volume of blood may pass through alveolar capillaries which are exposed to stagnant alveolar gases. The single most easily determined factor in chronic pulmonary insufficiency is that of chronic bronchial obstruction. Detection and treatment of this factor is essential for proper management of chronic respiratory disease.

Careful respirometer studies of ventilation will support quantitatively a clinical impression of bronchial obstruction. Occasionally an element of bronchial obstruction can be detected that cannot be identified by other means. These two features are especially valuable when the bronchial obstruction proves reversible. In addition, quantitative measurements of the degree of bronchial obstruction permit serial determinations of ventilatory function, thus evaluating the effect of therapy. Intensive therapy may be employed early and when the measurements indicate optimal response, the studies will aid in selecting an effective maintenance program. The results may be helpful in indicating supplemental therapy, such as expiratory exercises and intermittent positive pressure breathing. The response to various forms of therapy may help to identify the factors causing bronchial obstruction. Immediate improvement after administration of bronchodilator aerosols would suggest bronchospasm as a factor. Slower sustained improvement after antibiotic therapy would suggest infection. Other major factors, such as mucosal edema, excessive exudate, and fixed fibrotic narrowing of the bronchi, can be determined with less certainty.

Disability due to chronic pulmonary disease can be judged more accurately when the ventilatory function is known. In our industrialized society complicated by air pollution, tobacco abuse, and an aging population the incidence of chronic pulmonary diseases can be expected to rise. The problem is one of early recognition and therapy of pulmonary impairment and if necessary change of occupation and residence. Respirometer studies of ventilatory function are valuable in determining whether the degree of ventilatory impairment is sufficient to warrant these measures.

A respirometer is in essence a large floating cylinder into which a patient breathes through a low resistance connecting tube. It is so calibrated that volume change within the cylinder can be determined. The cylinder should have a capacity of from ten to fifteen liters. A low resistance to air flow is essential. In machines equipped with duplicate unidirectional flow valves and carbon dioxide absorbing cylinders, it is best to remove all but the most essential elements, in order that resistance to air flow be at a minimum. The

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minimum measurements performed are the vital capacity, the three-second vital capacity, and the maximal breathing capacity.

The vital capacity is the volume of air that can be expelled by maximum expiration after maximum inspiration. The three-second vital capacity is the percentage of air expelled during the first three seconds of a vital capacity determination. The maximal breathing capacity is the volume of air, expressed in liters per minute, that can be inhaled and exhaled by maximum ventilatory effort. It is customary to measure the volume for a shorter period of time and extrapolate to one minute.

The technique of accurate measurement can be mastered with practice, and is outlined in the following step:

1. The patient is seated comfortably in a straight back chair with the nostrils compressed in an occluding clamp. He breathes quietly through a standard rubber mouthpiece similar to those used in a basal metabolic rate test. Leaks in the system are recognized by a changing level of the expiratory baseline and should be corrected.

2. At the end of a quiet expiration the patient is told to take as deep a breath as possible and then blow out as hard and as long as possible. Observation of the patient during this vital capacity measurement will indicate if a maximum effort is being recorded. If not, the patient should be encouraged and subsequent efforts may yield improved results.

3. The patient then rests while the respirometer is filled with fresh air and rechecked for leaks.

4. To determine the maximal breathing capacity the patient is instructed to breathe in and out as deeply and as rapidly as possible until told to stop. The recording is continued for a measured time (usually the time between two vertical lines on the record paper —ours is twelve seconds) and then the patient is permitted to rest.

 (a) Occasionally a patient will exhibit an inefficient rate or depth of ventilation and may have to be instructed to breathe deeper or faster. A rapid series of one to two liters breaths is a good level for which to strive. The majority of patients will automatically select the most efficient rate and depth of respiration.

 (b) Invariably, the patient must be repeatedly stimulated verbally during the testing to ensure maximum effort.

5. The patient rests while the measurements are estimated. If repeated efforts are indicated they should then be performed.

6. The results are then calculated.

 (a) The vital capacity is determined from the vertical excursion of the pen, multiplied by a constant which is characteristic of the particular respirometer used. The result obtained is expressed in milliliters.

 (b) The volume of air expelled during the first three seconds of the vital capacity is then determined and expressed as a percentage of the vital capacity.

 (c) The maximal breathing capacity is determined by adding the volumes of successive inspirations for a selected period of time and extrapolating to one minute. The results are expressed in liters per minute. Some more elaborate respirometers will add each inspiration by means of a second rachet-driven pen. When the excursion of this pen is multiplied by a constant the results are obtained directly in liters per minute.

7. From age, sex, height, weight, and body surface area of the patient, the normal values can be calculated from available formulas. The normal three-second vital capacity is constant in all individuals being approximately 97 to 100 per cent of the vital capacity. For these formulas and other details, the interested reader is referred to the excellent and comprehensive discussion of lung function in the monograph by Comroe *et al.*[1] The patient's measurements may then be expressed as a percentage of the normal for his age and body configuration. The absolute accuracy of the normal values is not essential, since subsequently the patient is compared only to himself. The recordings may be easily mounted on large file cards for later reference. The numerical values may be written conveniently beside the recordings.

Intelligent interpretation of the measurements depends on an understanding of the phenomena which they represent. Reduction of the maximal breathing capacity far out of proportion to the loss of vital capacity indicates bronchial obstruction. Experience indicates that the maximal breathing capacity (expressed in per cent of normal) may be reduced to as low as one-third to one-quarter of the vital capacity (also expressed in per cent of normal). Confirmatory evidence may be found in the reduction of the three-second vital capacity. Failure of the three-second vital capacity to confirm the abnormalities of the maximal breathing capacity is occasionally encountered, but this should suggest a review of the tests and possibly their repetition with emphasis on maximum effort. Other abnormalities of ventilatory physiology seen in chronic bronchial obstruction with emphysema, such as air trapping and hyperinflation, may also be detected. Air trapping would be indicated by inability of the patient after maximum inspiration to return to his resting expiratory level until after two or more subsequent breaths. Hyperinflation would

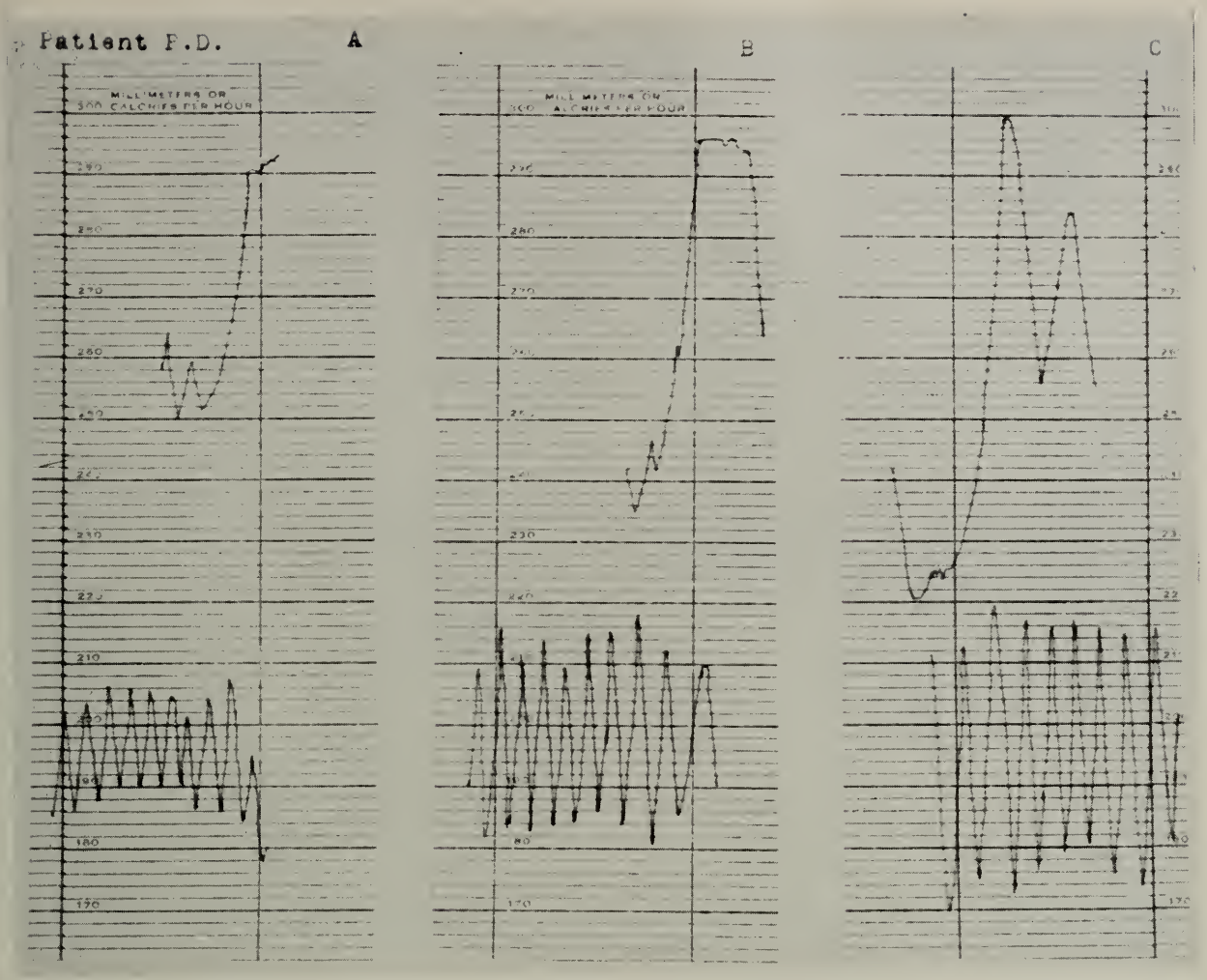


Fig. 1.

TABLE I.

Case	A	B	C
1. Patient P.D.			
VC	1600 ml. (45%)	2250 ml. (63%)	3050 ml. (87%)
3 sec. VC	100%	100%	92%
MBC	34 l/min. (34%)	47 l/min. (45%)	57 l/min. (53%)
2. Patient J.M.			
VC	2200 ml. (56%)	2300 ml. (58%)	2200 ml. (56%)
3 sec. VC	68%	93%	100%
MBC	28 l/min. (32%)	41 l/min. (47%)	50 l/min. (58%)
3. Patient C.H.			
VC	1886 ml. (50%)	2210 ml. (58%)	3240 ml. (86%)
3 sec. VC	83%	92%	90%
MBC	20.4 l/min. (15%)	43.5 l/min. (32%)	73 l/min. (53%)
4. Patient W.B.			
VC	1440 ml. (45%)	2050 ml. (65%)	1970 ml. (63%)
3 sec. VC	77%	72%	67%
MBC	18.2 l/min. (20%)	25 l/min. (28%)	27 l/min. (31%)

VC = Vital Capacity.
3 sec. VC = Three-Second Vital Capacity.
MBC = Maximal Breathing Capacity.
Percentage figures in parentheses refer to percent of normal determined from tables.

be suggested by elevation of the resting expiratory level.

The records of four patients with respiratory disease will illustrate the value of ventilatory studies. The measurements are given in Table I. The tracings of patient P.D. are shown in Figure 1 to aid the interested reader in picturing mentally the results.

Case Reports

Case 1.—P.D., a colored man, aged sixty-eight, had "asthma" for two years, characterized by dyspnea on exertion, with recent superinposition of orthopnea and pedal edema. Physical examination revealed an emphysematous chest with diffuse expiratory wheezing. Electrocardiograms exhibited the pattern of right ventricular hypertrophy. Roentgenograms of the chest revealed hyperaeration with some bleb formation. Treatment consisted of salt restriction, digitalization and diuretics with moderate relief. Initial ventilatory measurements (Table I, Column A) revealed a decrease in vital capacity and maximal breathing capacity that was partially restored by bronchodilator aerosol therapy given three times each day for two days (Column B). Therapy was given once daily for an additional six days. During this period the patient was symptomatically relieved. Measurements on the final day of treatment (Column C) revealed moderate improvement.

Case 2.—J.M., a white man, aged eighty-two, complained of exertional dyspnea for eight years, which had been increasingly worse for three years and particularly severe for the three weeks prior to admission. Physical examination and chest roentgenograms revealed pulmonary emphysema. Ventilatory measurements revealed a pattern of bronchial obstruction characterized by a loss of maximal breathing capacity greater than the loss of vital capacity (Table I, Column A). The pattern was partially reversed by bronchodilator aerosol therapy (Column B). Therapy was continued with antibiotics added in the hope that subclinical infection would be relieved. After four days the ventilatory patterns revealed complete relief of bronchial obstruction (Column C). A significant loss of function persisted attributable to restriction of motion secondary to fibrosis and loss of elasticity.

Case 3.—C.H., a white man, aged fifty-four, had chronic bronchitis with wheezing and productive cough for three years. For one month he had paroxysms of cough with dyspnea. Physical examination and chest roentgenograms revealed moderate emphysema. Electrocardiograms were normal. Sputum culture grew a mixed flora. Ventilatory studies revealed a marked loss of function due to bronchial obstruction (Table I, Column A), in that maximal breathing capacity was reduced far out of proportion to the decrease in vital capacity. A diminution of the three-second vital capacity confirmed this finding. Therapy with bronchodilator aerosols resulted in immediate improvement (Column B). The therapy was given three times each day for seven days. Ventilatory studies on the last day of treatment demonstrated marked relief of bronchial obstruction (Column C); however, moderate hyperinflation persisted.

Case 4.—W.B., a white man, aged seventy-one, had a chronic productive cough and exertional dyspnea for several years. Physical examination revealed marked emphysema with scattered sibilant and dry rales. Right bundle branch block was evident on electrocardiograms. Roentgenograms revealed advanced emphysema. Sputum culture grew a mixed flora. Ventilatory studies revealed a greater loss of maximal breathing capacity than of vital capacity. The three-second vital capacity was also diminished (Table I, Column A). Repeat studies immediately after administration of a bronchodilator aerosol demonstrated an unchanged degree of bronchial obstruction. The patient was then given an antibiotic and a wetting agent by intermittent positive pressure aerosol three times each day for seven days. Repeat studies (Column B) revealed some improvement in function, but a persistent large element of obstruction. The patient was then given oral bronchial antibiotic therapy. Thirteen days later, ventilatory studies revealed relapse to the initial level. Subsequently, the response to bronchodilator aerosols was gratifying (Column C). The response on this occasion suggests that infection must be cleared before full response to bronchodilators can be anticipated.

The preceding case reports illustrate some of our experience with ventilatory studies during the past two years. In this period we have been impressed with the clinical examination as the basis of diagnosis. Respirometer studies aid by measuring quantitatively some of the ventilatory disturbances produced by bronchial disease. After ventilatory studies have been done, therapy may be elected intelligently and followed by serial studies. Ineffective therapy may be discontinued rather than pursued blindly; effective therapy may be continued with profit. Serial studies will indicate when maximum response to therapy has been obtained; they will aid in the planning of a maintenance program, and may indicate increasing difficulty necessitating resumption of a more vigorous therapeutic program. In the many patients with respiratory disease where several factors contribute to the disability identification and treatment of the single factor of bronchial obstruction may represent the difference between success and failure of therapy.

Summary

1. Respirometer studies of ventilatory function can aid in the identification of bronchial obstruction as a factor in pulmonary disease.

2. Selection and evaluation of therapy are facilitated by the simple determination of vital capacity, three-second vital capacity and maximal breathing capacity.

3. The technique of measurement and several representative cases are discussed briefly.

References

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Moles—Benign or Potentially Malignant?

By Kirk V. Cammack, M.D.
Flint, Michigan

A PHYSICIAN who has had to stand by and watch the ravages produced in a patient by metastatic melanocarcinoma cannot help but feel considerable frustration. Because the malignancy originates from a small mole which the patient has known about for many years, one cannot help but feel that here is one cancer death that could have been easily prevented by early prophylactic excision.

When the physician is then confronted with the patient with a considerable number of moles found on the average person, his prophylactic zeal is then dampened. Practically, he cannot remove all of them. Which particular moles should be excised and which others can be considered relatively safe? A few basic tenets will help solve this problem. It will be of use to briefly review and amplify some of the characteristics of the various types of nevi, both grossly and microscopically.

Melanomas are classified into five main groups: (1) intradermal nevus, (2) junctional nevus, (3) compound nevus, (4) juvenile nevus, and (5) blue nevus. We shall briefly consider each of these lesions.

Intradermal Nevus

Grossly this lesion may be smooth, papillary or hairy, and of various shades of pigmentation. The presence of hair in a pigmented lesion is strongly presumptive, but not conclusive evidence that the lesion is of the intradermal type. These lesions are almost never found below the knee or on the hands or genitalia. Intradermal nevi are rare before puberty. This will be discussed later. Microscopically these lesions are characterized by an intact epidermis with melanoblasts lying entirley within the dermis and showing no communication with the epidermal structures. The basal cells are in their regular pattern and have no suggestion of irregularity. Clinical recognition of this lesion is of considerable importance because intradermal nevi do not undergo malignant change.

Junctional Nevus

Grossly the junctional nevus is flat and only slightly raised, hairless, and of various shades of pigmentation from light tan to black. The distribution of the junctional nevus is characteristic. They are usually found on the genitalia and extremities, particularly below the knees and elbows. Recognition of a potentially malignant nevus or frank melanocarcinoma of the mucous membranes is especially difficult, due to the fact that 50 per cent of the mucous membrane lesions are nonpigmented and present considerable difficulty, both in the clinical and microscopic diagnosis. The head and neck are next frequent sites, with the trunk having the lowest incidence. Microscopically the melanoblasts lie in the lower epidermis. There is scattered melanin pigmentation inconsistently involving the basal cells. Melanoblasts can be seen at the epidermal-dermal junction lying singly and in nests. Some will be well-circumscribed nests while others will show nevus cells scattered diffusely through the junctional area. The less circumscribed lesions are considered to be the premalignant type.

The clinical recognition of this type of nevus is important because they are the potentially dangerous nevi. It is now believed that with very rare exceptions, all melanocarcinomas of the skin arise from the junctional nevi.

Compound Nevi

This type of nevus represents a combination of the two types described above. In other words, it is an intradermal nevus with a junctional component. In one area of the microscopic picture the epidermal-dermal junction will show the changes described in the junctional type of nevus. These lesions do not contain hair. If a patient has a nevus that spontaneously looses its hairy characteristics, it should suggest to the clinician that a junctional change, and therefore a potentially

From the Department of Pathology, Hurley Hospital, Flint, Michigan.

malignant one, has occurred. Approximately 98 per cent of the moles examined before puberty will show a compound component, while only 12 per cent of adult moles will show this picture.

Juvenile Nevus

This statistic brings up the problem of moles in the prepubertal patient. Melanocarcinoma is very rare before puberty. The microscopic appearance of the juvenile nevus, however, closely resemble the adult malignant melanocarcinoma. In other words, in the great majority of cases the juvenile nevus will present a microscopic appearance which will often be called malignant, but will follow a benign course clinically. Due to the malignant appearance of juvenile nevi under the microscope, many unnecessary radical procedures on children have been performed.

Endocrine Considerations

Because of the differences between prepubertal moles and adult moles, there must be some endocrine influence on the growth of nevi and melanocarcinoma. The very rare cases of prepuberal melanocarcinomas probably reflect an adult component in the endocrinology of these children. To further suggest the endocrine influence in nevi, it has been reported that ACTH therapy has initiated new junctional nevi in adults.

Results have been observed that the presence of melanocarcinoma in one area of the body activates junctional nevi in distant areas of the body. This of course suggests some humeral influence.

The fact the cutaneous carcinoma in the female has a significantly better prognosis than in the male also suggests an endocrine influence. Pregnancy also aggravates melanocarcinoma, and a different microscopic appearance in melanocarcinoma in pregnancy has been described.

Blue Nevus

This mole is mentioned for the sake of completion. They are usually located in the buttocks or dorsum of the hands and feet. They are flat and smooth, very dark, brown to blue-black, and hairless. They rarely become malignant. There is a type of cellular blue nevus which can probably be classified as clinically benign with an occasional well differentiated lesion found in an adjacent lymph node with no further metastases occurring. Pathology of this so-called benign metastatic cellular blue nevus is obscure.

Comment

Removal of potentially malignant lesions should be carried out with a cold knife and with an adequate border of grossly normal skin surrounding. This, of course, should be submitted to a competent pathologist for microscopic study. Lesions reported as malignant, that have had an adequate wide excision with surrounding normal skin, should probably be treated conservatively until such time as recurrence appears. After recurrence, radical surgery should then be considered. The high percentage of the five year survival has occurred in patients whose only treatment was local excision. It is believed that trauma probably has no relation to the production of melanocarcinoma in a junctional nevus; however, the removal of a nevi, clinically recognizable as a possible junctional type and located in areas subjected to trauma, is indicated as is removal of any clinical junctional nevus. Change in size, color, ulceration with minimal trauma, represent possible malignant change. Ulceration in a diagnosed melanocarcinoma gives a poor clinical prognosis despite the size or absence of metastases.

The diagnosis of a juvenile type nevus in an adult instead of melanocarcinoma is believed by Allen to be possible. This gives the patient a good prognosis. The lesion will be microscopically malignant looking, but clinically benign.

MEDICAL TELEVISION SHOWS

Produced by Michigan Health Council

Sept. 2, 1956	WJBK-TV, Detroit	"Traffic Safety"	Film—"According to the Record"
Sept. 9, 1956	WJBK-TV, Detroit	"Antibiotics"	Film—"The Earth Shall Give Back Life"
Sept. 11, 1956	*WKAR-TV, East Lansing*	"Farm Safety"	Richard Pfister, East Lansing
Sept. 16, 1956	WJBK-TV, Detroit	"M.S.M.S. Annual Session"	Arch Walls, M.D., Detroit D. Bruce Wiley, M.D., Utica W. B. Harm, M.D., Detroit
Sept. 23, 1956	WJBK-TV, Detroit	"Rheumatic Fever"	Film—"The Valiant Heart"
Sept. 27, 1956	*WKAR-TV, East Lansing*	"Physical Fitness of Children"	F. Mansel Dunn, M.D., Lansing Norman Blystone, Lansing
Sept. 30, 1956	WJBK-TV, Detroit	"Meat—With Approval"	2 Films—"Meat—With Aproval" "Step-Saving Kitchen"

Toward Better Public Service

President's Message



You know and I know that the first concern of the medical profession is to serve the public. As individual doctors of medicine, our practices rise or fall on the basis of our success in serving our patients. On a broader basis, the success or failure of our medical society depends upon how well it serves the public generally. In consequence, Medicine directs its actions constantly toward better public service.

These are familiar concepts to us; they are elementary, but they are not so well known to the public. Indeed, sometimes our personal actions and our Society's decisions have been construed to be against the public interest. The dangers to the public and to the profession of such misinterpretation are obvious. The public loses confidence in our recommendations; we feel aggrieved because we are misunderstood; those who have little knowledge but big ideas are given undue credence; confusion reigns.

What is the answer? What steps should we take to give us reasonable assurance that our actions will be understood for what they really are?

One answer is found in this number of THE JOURNAL. For the first time in the history of MSMS, and perhaps in the history of any other state society, a compendium has been made of practically all the public service programs of MSMS. They're not intended to be complete, but they do indicate the work being done. If these articles are given wide circulation, perhaps some understanding of the thousands of hours spent by M.D.'s in behalf of the public through their medical society will be more apparent. Reprints are being made to permit wide distribution of this series.

But that isn't the whole answer. The other part lies in the doctor's office. We've said before, and we say again, that each doctor's office should be an information center. Surely, information should go to the doctor's patients to help them get well and keep well. But of equal importance, information should be given to the patients, to their families and to the doctor's friends on how they can join with the medical profession to improve the public's health. That isn't propagandizing; it's sheer necessity if we are to carry out our true function, namely giving better health service to the public.

Ours is an "open door" policy. We welcome the help of the public. But it's a two-way deal, and we must offer our help and advice to the people, as well as accept public support. That way everybody gains.

Arch Walls M.D.

President, Michigan State Medical Society

Editorial

PUBLIC RELATIONS

In this number of THE JOURNAL, we believe the Public Relations Department of the Michigan State Medical Society has accomplished a major milestone in the continuous progress of that Society. Never before have we, or any other society, attempted to outline to our readers the great public services rendered day after day by the medical profession.

Essentially, our public relations workers felt the need of methods to inform many interested contact groups of our ideals, ambitions, and accomplishments. Legislators and our own members are constantly asking for information which is sometimes difficult to document. This November Public Relations Number is the answer. Instead of preparing an exposition in the form of a special article which might be long and dull, chairmen who are heads of twenty-seven separate committees or of special endeavor growing out of Michigan State Medical Society work were asked to write short articles outlining their work, ideals and goals.

They were deliberately given an almost impossibly low word limit, knowing their efforts would be condensed and intensified and rewritten several times, and that the final product would be decidedly readable. Twenty-seven responded, a record unanticipated but certainly most gratifying, and we thank our contributors most sincerely. The untiring workhorse is our own excellent Public Relations Counsel, Hugh W. Brenneman.

The tradition of the medical profession from ancient times has always been "service to our patients and people." That is not medical care alone. The time-honored and much beloved family doctor was, in days and ages gone by, a personal advisor and father confessor as well as dispenser of pills. In most communities, he was the only college educated person. Naturally, his opinion and advice was sought on many matters other than medicine, and he was never too busy to give his advice or service.

Our modern generation of doctors never knew the stimulating contentment and satisfaction of our not-too-distant predecessors, and now a college education has become so tremendously universal that that type of advice is seldom sought. This series of articles, however, will prove that the medical profession is still actively fulfilling its greater obligations.

We may well be proud of the situation being presented. To well over a third of our members much of the material will be a new concept of our work. Conferences throughout the state have shown uniform unfamiliarity with the accomplishments of our "committees" consisting of more than 650 "workers."

INCREASED HOSPITAL UTILIZATION

It has been claimed, in testimony and allegations resulting from the Governor's Hospital Study Commission, that doctors send patients into hospitals much more frequently than formerly—for the convenience of care and to obviate many house calls which would otherwise be needed. It is admittedly true that a doctor and especially a very busy one, can see more patients if they are congregated in one hospital; so can a laborer do more work on a production line, where the work material passes before him and all he has to do is a few maneuvers.

But let's look at the record. An increasing percentage of our general public is past sixty-five years of age—9 per cent now. *Public Health Economics* reports that the average expenditure for "medical" care of the general public is $60 per year, but for persons over age sixty-five, it is $104. The inference is that older people need and get almost twice as much "medical" service as the general average, as there is almost twice the need.

Our modern economic status gives us much smaller homes because of increased building costs. In almost all houses there are just enough rooms for the family needs. For the elderly retired person the stress is greater. Very few of our homes customarily have domestic help, except for cleaning done at hourly rates. If anyone becomes ill enough to call a doctor, the house is disrupted. There is no convenient sick room, and someone must stay home from work to care for the patient. This means loss of income unless the patient is sent to a hospital, and the doctor com-

plies—another hospital bed in use. The hospital is pleased, the patient contented, the family relieved, and the doctor finds his "rounds" easier. Another not-too-sick patient occupies a hospital bed, and at present there seems to be no other way. Economic stress is a very potent factor in filling our hospial beds. Industrial demands call for no loss of working days by the laboring part of the family, and the doctors are again charged with unnecessarily filling the hospitals.

The beds used are very costly—too costly according to our critics. Blue Cross pays its hospitals a per diem on all patients. What does that mean? The hospital charges for room and board are just a small part, but are the factors usually considered in discussing charges. There are also operating room charges, laboratory, routine checks, electrocardiograms, radiologic plates, encephalograms, medication, hall nursing, anesthesia, all being added and averaged to determine the hospital day cost. For the seriously ill person all these services are at hand if and when needed, but for the average hospital case, especially among the older group, "nursing home" service would be all that is necessary. But those rooms are charged just the same as the others, with no distinction.

Discussing the new medical center in Detroit in the July JOURNAL, we suggested that some modern up-to-date well-equipped nursing homes or convalescent and custodial beds might be a worthwhile addition to the projected center. It is just within the range of possibility that such beds are soon to be much more in need than extended construction of the expensive general hospital beds which are now being considered. Most of our patients after the first three or four days could be cared for in, possibly, a ten or twelve dollar a day room instead of at the $30 or more rate they now pay.

This would surely provide more beds and less "bed unavailable" replies.

INDOCTRINATION

Far too few of our county and district medical societies take the trouble to formally indoctrinate new members in the ideals, practices and advantages of membership in the organized medical profession. Most of them seem to believe that when the young doctor "joins" their job is done. A new member is obtained and, in too many instances, at the next annual meeting of the society he is made secretary.

A young man, absolutely ignorant of the medical society workings is given its most important job, upon which depends the very future of the whole group. Many very promising societies have been sent to their doom by such thoughtless action.

Some of our societies have a formal program of "indoctrination." New members are given careful instruction and coaching, including friendly talks about the things "not done" but also many of the things "to do."

Some of our State Medical Society committees for years have been at work in various contacts and services to our public, but have neglected the important education of our own new members. They have gone into the medical schools and talked to the undergraduates and interns on selected subjects. Michigan has a well conducted program along this line.

It is planned to reprint much of the current material of this JOURNAL and make it available to future groups of new doctors who will not have seen it.

A NEW HOME

During the year, President William S. Jones, M.D., suggested that the Michigan State Medical Society appoint a committee to look at the future of the society and make plans for a vastly enlarged functioning. The foremost idea in his mind was securing a new and adequate home office. In July, 1951, the administrative records, office materials, and mailing equipment were moved from the old offices in Olds Tower to the newly acquired building at 606 Townsend Street, Lansing.

The accommodations at the old office were very inadequate, with no possibility of enlargement. It was believed the renovated three-story residence and, later, apartment dwelling offered ample room. At the end of three years, the exterior had been modernized and the interior made attractive and operable. But now everything is crowded! Three floors with a used basement do not offer convenience of operation. More room is needed and the accessibility of the various endeavors and offices is almost a "must."

The Council suggested, and the House of Delegates approved on Tuesday, September 25, 1956, that a site be purchased. They also approved a

special assessment of five dollars a year to be earmarked expressly for a new building designed to fill our increasing needs.

In just five years, we have outgrown what was expected to be adequate for many years. The new site should be large enough and sufficiently removed from the business center that we may anticipate permanency, and if there is room for expansion we shall be secure. The Michigan State Medical Society has become an impressive entity which needs and is worthy of the best possible housing within reason in keeping with the dignity of our Society.

PRESIDENT-ELECT



George W. Slagle, M.D., of Battle Creek, was selected at the 1956 annual meeting as President-elect to succeed Arch Walls, M.D., of Detroit who becomes President. Dr. Slagle is the son of a doctor, Charles D. Slagle, from Dayton, Ohio. He graduated from the University of Michigan School of Medicine in 1933. He was on the medical staff of the Battle Creek Sanitarium, then entered private practice in that city in 1937.

Dr. Slagle entered Naval Service in January, 1942, serving sixteen months in Pacific waters aboard the U.S.S. Astoria, a fast cruiser, participating in assaults on Iwo Jima, Okinawa and Japan. In March, 1944, he suffered facial and arm burns when gasoline exploded during a fire drill, and he was separated from the service in November, 1945.

He was elected to Fellowship in the American College of Physicians in 1943. He served as alternate and as delegate to the Michigan State Medical Society, and has been a councilor since 1950. He has been a member of the Battle Creek Community Chest, the Calhoun County Tuberculosis Association, the Battle Creek Country Club, and the Exchange Club, of which he was president. He is Chief-of-Staff of Community Hospital, Chairman of the MSMS Advisory Committee to the State Department of Social Welfare, Member of the Board of Directors, Michigan Medical Service, and of the Blue Shield Study Committee and Veterans Affairs Committee.

Dr. and Mrs. Slagle have three children, a daughter in Los Angeles studying vocal music, a daughter at the University of Arizona, and a son, who is a junior at Lakeview High School.

MEDICARE

Congress has passed, and the President has signed into law, to take effect at midnight on the morning of December 8, 1956, a bill providing for medical care, home, office, and hospital, for dependents of military personnel.

As of this date, October 11, an agreement is being arranged between the medical profession of Michigan and the Department of Defense to carry out the purposes of this act. Michigan Medical Service has been designated by the State Society as mediary and the Council has established the fee schedule of our $5,000 policy as the basis of this service.

When a doctor accepts one of these patients, the payment made through this program is accepted as full coverage. The government is providing these extra services to its military people to make its soldiers more content, and to give care which is not generally available in civil life.

As soon as the final details of this service are agreed upon they will be published, but it is important for our members to know now that this group will be cared for without question, the government reimbursing Michigan Medical Service in much the same manner as it does the Michigan Hometown Care for service-connected veterans' disabilities.

MEDICINE AT WORK

Under this heading, *The Journal of the American Medical Association* has started a new column to be published from time to time, featuring "attempts of the medical profession and other groups interested in health to solve medical problems facing this nation." (Incidentally, this present number of The Journal MSMS is devoted in large measure to expressing that same problem and telling the story from Michigan's viewpoint.) The *J.A.M.A.* for September 29, 1956, has two short editorials announcing the new section. "Portraits in Harmony" refers to a five-column article telling the story of obtaining doctors for rural areas, including Michigan's experience in establishing a doctor with an office and home in Hillman, Michigan. A picture of the "Clinic" is given, and the Michigan Health Council's work is mentioned.



Enthusiastic crowd fills Grand Ballroom for Officers Night ceremonies Wednesday. Woman's Auxiliary co-sponsored event with MSMS. Traditional Biddle Lecture, presented this year by General Motors Vice-President Lawrence R. Hafstad, installation of new officers of MSMS, and retiring President's Address were highlights of the evening.

Biggest Annual Session Ever

The 91st Annual Session of the Michigan State Medical Society positively exuded warmth. The weather was warm, the speakers and exhibitors warmed to their tasks, and the smiling countenances of doctors, their wives and their assistants testified to warm reunions with old friends.

The six-day event began with a meeting of The Council on Sunday, September 23, picked up tempo Monday and Tuesday with meetings of the House of Delegates, and smashed to an attendance record of 4,290 in the succeeding scientific assemblies. It all ended the following Friday afternoon with the sounds of exhibitors' hammers, as they tucked away their displays, echoing the enthusiastic applause of the final assembly.

Altogether, thirty-seven eminent lecturers gathered from across the nation to bring these groups (in twenty-nine assemblies) the latest techniques and discoveries of practical, everyday use, covering such areas as surgery, jaundice, tuberculosis, cancer and psychotherapeutics to mention but a few. Sixteen section meetings discussed today's advances in specialized fields of medicine and surgery. One hundred and two exhibitors jammed the fourth floor of the Sheraton-Cadillac with scientific and technical displays demonstrating the newest in research, drugs and equipment.

Noteworthy, too, is the fact that this year through the eyes and ears of the press, radio and TV and by extensive use of tape recordings, motion pictures, mobile studios and wire services, the outside world looked in on the daily proceedings as never before. Scientific lectures were reduced to lay language and given nation-wide attention, and the deliberations of the House of Delegates were reported coast to coast.

The all-time record registration at the 1956 Annual Session of the Michigan State Medical Society was 4,290. The breakdown follows:

Doctors of Medicine	2,454
Guests	649
Exhibitors	554
	3,657
Woman's Auxiliary members	232
Medical Assistants members	401
GRAND TOTAL	4,290

On Wednesday and Thursday of the same week, the Fort Shelby Hotel hummed with activity as the Woman's Auxiliary gathered for its Thirtieth Annual Meeting. At the same time, over at the Detroit-Leland, the Michigan State Medical Assistants Society held its Seventh Annual Session. A new attendance record of 401 was set at the latter event.

Turn the page for pictures of the events of the week-long, record-smashing session.

House of Delegates



James J. Lightbody, M.D., newly elected Vice Speaker of the House of Delegates, receives congratulations of predecessor Kenneth H. Johnson, M.D., who was advanced to office of Speaker.



Jackson E. Livesay, M.D., Speaker of the House of Delegates, calls the annual meeting to order Monday, September 24, in Detroit.



At the Speaker's table, Miss Helen Schulte of the MSMS Lansing staff, and MSMS Secretary L. Fernald Foster, M.D., double check every detail in keeping an accurate record of the annual proceedings.

Officers Night



rch Walls, M.D., Detroit *(center),* and George W. Slagle, M.D., Battle Creek, MSMS President and President-Elect respectively, getting friendly advice on the "rigors of the office" from retiring President W. S. Jones, M.D., Menominee.



Three Past Presidents-for-Day of MSMS were presented their Keys during Officers Night ceremonies, Wednesday. Wilfrid Haughey, M.D., Battle Creek, receives traditional Key and congratulations from D. Bruce Wiley, M.D., Chairman of The Council. Similar honors were accorded L. Fernald Foster, M.D. and R. L. Novy, M.D.

Distinguished Guests



VISITING DIGNITARIES during the week-long official business and scientific lecture sessions chat with Michigan hosts. *(Seated)* Lester Reavely, M.D., President-Elect, Illinois State Medical Society; J. C. C. Dawson, M.D., President, Ontario Medical Association; Wilfrid Haughey, M.D., President, Michigan Medical Service. *(Standing)* L. O. Simenstad, M.D., President, State Medical Society of Wisconsin; W. U. Kennedy, M.D., President, Indiana State Medical Association; Arch Walls, M.D., MSMS President.



LAWRENCE R. HAFSTAD, Vice President and Chief of Research Staff, General Motors, Detroit, receives Biddle Lecture Scroll from W. S. Jones, M.D. *(right)* in recognition of his oration in memory of Andrew P. Biddle, M.D., patron of postgraduate medical education. An annual lecture by an outstanding citizen is the high point of the Officers Night Banquet. Dr. Hafstad spoke on "The Future of Atomic Energy and Medicine."



ON BEHALF OF MSMS, R. C. Connelly, M.D., Detroit, hands Beaumont Scroll to Leon Schiff, M.D., Cincinnati, in appreciation for delivery of a scientific paper at the Annual Session. This scroll is presented yearly in memory of the pioneer Michigan doctor, William Beaumont, M.D.



TAKING BOWS with retiring MSMAS President Hallie Cummings *(left)* is her successor Doris Jarrad, Lansing, with Secretary Dorothy Little, also of Lansing, and President-Elect Marlouise Redman, Detroit.

The Ladies



MRS. F. M. GASTINEAU, Vice President of the AMA Woman's Auxiliary, signals end of presidential year for Mrs. Delbert MacGregor, Flint, with Past President's pin.



MSMS AUXILIARY PRESIDENT-ELECT, Mrs. C. Allen Payne, Grand Rapids, wistfully ponders duties of next two years in official role. Grover C. Penberthy, M.D., General Chairman of the Officers Night Banquet, was MSMS President twenty-one years ago.



MSMS AUXILIARY PRESIDENT, Mrs. A. C. Stander, of Flint, heads membership of 3,000 embracing auxiliaries to forty-eight Michigan County Medical Societies.

The MSMS Annual Meeting - 1956

The ninety-first annual meeting of the Michigan State Medical Society is now history, and its smooth operation with a vast amount of work done is a matter of pride. A total of 4,206 registrations was a record number, including 2,454 Doctors of Medicine, 554 Exhibitors, 232 Woman's Auxiliary members, 401 Medical Assistants and 649 guests. Among the guests were the President-elect of the Illinois State Medical Society and the Presidents of the Medical Societies of Wisconsin, Indiana and Ontario. These men attended most of our legislative meetings, and other functions including the meeting of the Corporation of Michigan Medical Service.

The Council

The Council met at noon Sunday, and adjourned after 10:00 p.m. that night. It reviewed the supplementary report bringing the affairs of the Society up to that day. There were many committee reports to study and approve before they became official—a regular feature of every meeting of the Council or its Executive Committee. The recommendations to the House of Delegates were restudied and augmented. Reports were received from the President, President-elect, the Secretary, Treasurer, Editor and Chairman of the Council. The Public Relations Counsel reported, as did the Committee to Select an Attorney, and the Committee on Closed Panel Practice and on Fee Schedule for the proposed $6,000 limit fee schedule as requested through several labor negotiations.

At the second Council meeting Friday forenoon, reports were made by Mr. Jay C. Ketchum regarding a report at the Michigan Hospital Service Board of Directors meeting Thursday evening, showing that if the new contract is to be sold at all, it must be released immediately; the companies asking for it are very displeased at the delay. The Council voted to release the Fee Schedule at once.

New Councilors were introduced: A. E. Schiller, Ralph W. Shook and H. H. Hiscock were re-elected. C. Allen Payne, M.D., of Grand Rapids, was elected to succeed Dr. Miller in the Fifth District. K. H. Johnson, M.D., Lansing, and James J. Lightbody, M.D., Detroit, were introduced as the new Speaker and Vice Speaker of the House of Delegates. Harold J. Meier, M.D., Coldwater, new Councilor of the Third District, was absent. The Council re-elected its officers.

House of Delegates

The House of Delegates was called to order Monday morning, September 24, 1956, at the Hotel Sheraton Cadillac, Detroit. The roll call indicated that most of the members were present. Some changes were noted in reference committees. J. E. Livesay, M.D., Speaker of the House, gave his address followed by the President W. S. Jones, M.D., and President-elect Arch Walls, M.D. D. Bruce Wiley, M.D., Chairman of the Council, gave the Supplementary Report. W. A. Hyland, M.D., Delegate to the AMA, gave the delegate's report. Mrs. Delbert MacGregor reported for the Woman's Auxiliary, of which she is President. Miss Hallie Cummins, as President, gave the report for the Michigan State Medical Assistants Society.

The Foremost Family Physician was selected from a list narrowed to three. R. G. Cook, retired, of Kalamazoo was the choice, but he was too ill to attend the meeting. The next order of business was the fifty-year awards. From a list of fifteen eligible, only five were present to accept the button.

Forty-four resolutions were presented and referred to reference committees, which met afterward in assigned rooms and spent many hours in deliberation, hearing everyone who wished to discuss the various matters. Resolutions had been requested to be presented in triplicate some time before the meeting, so they could be mimeographed and distributed to the delegates early, but this was not done. There was a suggestion that all resolutions be mimeographed as soon as introduced and distributed to each member before the evening meeting. That also was lost. A committee was appointed to study the tuberculosis problem and distribution of extra beds to the best advantage. The profession is concerned at the present number of empty beds.

The House of Delegates voted to rejuvenate the Committee on Fee Schedules for Governmental Agencies to study the schedule which has not been reviewed for more than five years.

During the sessions of the House, ninety-two members discussed the resolutions, showing a very active participation.

Resolutions adopted provided for a continuing or permanent advisory fee schedule committee; a special committee to confer with Michigan Medical Service and explore the possibility of a "comprehensive prepaid deductible or co-insurance contract, also the possibility of extending the services of the present contract"—meaning diagnostic services and coverage of procedures in doctor's offices."

The House, by resolution, suggested that the Michigan Medical Service annual report be prepared and included in the handbook, but will be satisfied if it can be ready to distribute during the first session; voted to increase the dues by ten dollars a year, five dollars to be a fund for a new

home, looking toward a new site and building which will be designed for our own use and be much more convenient.

Dr. Gordon Scott, Dean of the Wayne State University Medical School, was made an honorary member, as was J. Joseph Herbert (posthumously).

The House petitioned the Legislature for additional funds for Wayne State University College of Medicine. Such funds are to be used to increase the teaching staff and to make possible acceptance of fifty more students each year to a total of 125 in each graduating class. The School has the equipment, but not the money necessary for hiring teachers.

The House advocated that the office of Secretary of the State Board of Registration in medicine be made a full-time job with adequate salary. The question of osteopathic relations was deferred until a committee on the healing arts may be able to report.

Many other resolutions and actions of the House will be reported in the official record. These are just a few of special significance.

Elections—MSMS

The last order of business of the House of Delegates is always the election of officers. Councilor for the First District, A. E. Schiller, M.D., Detroit; Councilor of the Fourth District, Ralph W. Shook, M.D., Kalamazoo; and Councilor from the Sixth District, H. H. Hiscock, M.D., Flint, were all nominated without opposition and were elected by unanimous ballot. The retiring Councilor of the Fifth District, J. D. Miller, M.D., Grand Rapids, was not a candidate, and C. Allen Payne, M.D., of Grand Rapids, was elected unanimously. The three Delegates to the AMA House of Delegates whose terms are expiring January 1, 1957, W. D. Barrett, M.D., of Detroit, W. H. Huron, M.D., of Iron Mountain, and Robert L. Novy, M.D., of Detroit, were all reelected. Alternate Delegates, William Bromme, M.D., Detroit, John R. Roger, M.D., Bellaire, and George W. Slagle, M.D., Battle Creek, were reelected by ballot to determine seniority (so given). The election of a President-elect resulted in two nominations, George W. Slagle, M.D., Battle Creek, and L. C. Harvie, M.D., Saginaw. While the ballots were being counted, the House passed on to the next order of business. As the Speaker, J. E. Livesay, M.D., Flint, was not a candidate, K. H. Johnson, M.D., Lansing, Vice Speaker, was elected Speaker. James J. Lightbody, M.D., Detroit, was chosen Vice Speaker. At this time, the result of balloting for President-elect was announced: George W. Slagle, M.D., Battle Creek. This election made a vacancy in the Third District, and Harold J. Meier, M.D., Coldwater, was chosen to fill the vacancy.

Gridiron Dinner Scroll

For over twenty-five years, the Michigan State Medical Society has given a "Gridiron Dinner" on Thursday evening for the exhibitors and their friends as a part of the goodwill program. During the dinner this year, Mr. S. A. Montgomery, President of the National Medical Exhibitors Association, in making a scroll presentation, spoke as follows:

"All MSMS Gridirons are outstanding events. All Michigan medical service representatives look forward to this party which 'kicks off' the fall convention season. Significantly, many of you attending this Gridiron and representing your companies on the exhibit floor are 'head office' men and women. You have come to Detroit from New York, Chicago Philadelphia, and other cities. It goes without saying that you are here because you appreciate the warm hospitality of the Michigan State Medical Society. You are here because you can see and talk with so many of Michigan's outstanding physicians. You know that this meeting is 'more than just another state medical society meeting.'

To the Medical Exhibitors Association, representing more than 200 companies who regularly exhibit at professional meetings, tonight marks the first anniversary of an unprecedented event . . . the Michigan State Medical Society planned their 1955 GRIDIRON to commemorate the 25th Anniversary of Medical Exhibitors Association.

True, MEA had its beginnings way back in 1930 during a meeting of the Michigan State Medical Society. However, it is entirely probable that the founding fathers of MEA could not have persevered in fostering the growth of their young and struggling organization except for the encouragement and stimulation given to them by the MSMS officers and the Society's forward looking, aggressive and able executive director, Mr. William Burns.

Year after year Bill Burns and his ever changing "Bosses." the officers of MSMS, did everything within their power to encourage and help Medical Exhibitors Association. Their example was followed by a growing number of state medical groups. However, a good many years passed before MEA attained truly national status and recognition.

Most of us remember, and it seems only a few years ago, that the MEA Recommendations of Policies and Principles were seldom taken into consideration by many of the national medical associations. Now, however, I can state unreservedly that every great national medical association not only gives lip-service to the standards set forth by MEA, but also has sought and established the co-ordination between the ethical exhibitor and the medical society which was pioneered right here in Detroit by our hosts.

At last year's Gridiron, I had the honor of accepting for Medical Exhibitors Association from Dr. William S. Jones, the immediate past president of MSMS, a silver plaque carrying this beautiful inscription:

Presented by the
Michigan State Medical Society
to the
Medical Exhibitors Association
commemorating the
Silver Anniversary of the Founding
in Michigan
of the Medical Exhibitors Association
Recognizing twenty-five years
of valuable service in improving
the Medical Exhibit Industry
of America
1930-1955

This silver plaque has become the most beloved possession of our Association.

In order that our appreciation of this token of esteem may be fully known to the entire membership of the Michigan State Medical Society, the President and the Directors of Medical Exhibitors Association have directed me to present this scroll. I shall read the inscription:

To be signally honored by a medical association is the highest praise for any organization representing industry.

This the Michigan State Medical Society did publicly and significantly on the 25th Anniversary of the Medical Exhibitors Association.

In appreciation of this great honor and with a pledge of continued service to the medical and allied professions, we, the Medical Exhibitors Association present this scroll to the Michigan State Medical Society.

Therefore, I am honored in my commission of presentation to the Michigan State Medical Society's president, Dr. Arch Walls. We ask that he receive it in behalf of his Society's membership, the nicest folks we know, Michigan's doctors. (Presentation of scroll.)

Michigan Medical Service

The meeting of the corporate body of Michigan Medical Service was called to order by Wilfrid Haughey, M.D., President, on Tuesday afternoon, September 25, 1956, consisting of the seated delegates ex-officio and the elected directors of the corporation. A tour of the building, and a luncheon at the cafeteria preceded the meeting. After the call to order at 2 p.m. and roll call indicating most of the membership present, the Sixteenth Annual Report was presented. Three visiting Presidents and a President-elect from Ontario, Indiana, Wisconsin and Illinois were introduced.

Immediately following the introductions, the plan of balloting was explained and tellers appointed. Fourteen directors were to be elected, two representing the Michigan Hospital Association and at least one representing the public. The prepared ballot was distributed, after which one nomination was made from the floor. Although it was not supported by ten names as according to rule, by unanimous consent the nomination was accepted. During the interim of counting the ballots, reports were received from the Treasurer and the Executive Vice President. Replies were made to many questions asked. One topic, which had been before the House, was again explained: the difference and advantage of participation; also the "distribution" of fees when two or more doctors are serving the same patient. Some wished to make a distinction between participators and non-participators. Our attorneys say we can make no distinction in a financial way. However, the very fact that a sufficient percentage of participators made our plan possible at first, still is basic to sale of contracts.

Three doctors on the Board of Directors were honored by mementos from Blue Shield: Grover C. Penberthy, M.D., Detroit, who is retiring from the Board at his own request; Carleton Fox, D.D.S., Detroit, and Edward F. Sladek, M.D., Traverse City, who have completed ten years of service on the Board.

The results of balloting were announced: A. C. Kerlikowske, M.D., Ann Arbor and A. Kent Schafer, were elected representing MHS. Elected for a three-year term were: James B. Blodgett, M.D., Detroit; L. Fernald Foster, M.D., Bay City; W. A. Hyland, M.D., Grand Rapids; Mr. Ralph N. Long, Detroit; Ellery A. Oakes, M.D., Manistee; Wm. S. Jones, M.D., Menominee; Philip Riley, M.D., Jackson; Ralph W. Shook, M.D., Kalamazoo; and Donald W. Thorup, M.D., Benton Harbor. Max L. Lichter, M.D., Detroit, was elected to a two-year term. Edwin H. Fenton, M.D., Detroit, and Mr. Robert A. Frye, Detroit, were each elected for a one-year term.

Mr. Frye and Drs. E. H. Fenton, W. S. Jones, Max L. Lichter and Ralph W. Shook are new members on the Board.

* * *

On October 10, at a meeting of the Board, besides routine and other business, the following officers were elected:

Wilfrid Haughey, M.D., Battle Creek, Chairman of the Board
L. Fernald Foster, M.D., Bay City, President
Arch Walls, M.D., Detroit, Vice President
Bradley M. Harris, M.D., Ypsilanti, Secretary
Waldo Stoddard, Grand Rapids, Treasurer

The staff officers were re-elected.

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Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

PROGRESS REPORT ON SPECIAL PROJECTS

The special projects currently functioning in Michigan in the fields of tuberculosis and venereal disease control, cancer and heart disease are in varying stages of progress. The tuberculosis programs are financed by state grants made for that purpose, both state and federal funds are used in the venereal disease projects and the studies in cancer and heart disease are made possible by money allotted to Michigan from federal funds set aside for work with those diseases.

A study to appraise the value of hospital admission x-raying in tuberculosis case finding and case management is being carried out by the Department of Radiology at the University Hospital in Ann Arbor.

A part-time tuberculosis control officer is continuing to serve in Oakland County, to determine the effectiveness of providing a continuity of patient service from physician referral through isolation and treatment and post-sanatorium management.

Permanent chest clinics established in Monroe, Lenawee and Kent Counties are giving added service to the patient and practicing physicians.

Expansion of public health nursing services in Kalamazoo, Saginaw, Washtenaw, Mason, Manistee, Alger, Schoolcraft and St. Clair Counties is making possible increased attention to tuberculosis case finding and management.

The Southeastern Michigan Tuberculosis Detection Project initiated early in the year represents an attempt to combine all available state and local health department facilities for intensive high incidence chest x-ray screening. Represented in this effort are the health departments, practicing physicians, voluntary health agencies and other community groups from Detroit and Wayne, Monroe, Washtenaw, Oakland, Macomb and St. Clair counties.

On the state level the legislative grants for expanded tuberculosis case finding and management have been used for four purposes: (1) to establish central case registers; (2) to expand mobile x-ray screening activities; (3) to intensify nursing and medical social follow-up activities; and (4) to organize and administer training programs, including medical externships.

Two projects in screening for cervical cancer have been in progress in St. Joseph County with the county health department, the county medical society and the Cancer Society co-operating. Using the Papanicoleau test, 1,338 women twenty-six years of age and over were screened in the last series, with forty-two abnormalities reported. Of these, three were diagnosed as cancer, ten are continued as suspect cancer, while twenty-nine will require continued follow up and study.

A course in radiotherapy and training of technicians has been established in the Department of Radiology, Detroit Memorial Hospital.

Home nursing programs are operating in Barry and Branch-Hillsdale counties to determine how best to help families in the care of the chronic disease patient.

Medical externships have been established in Macomb and Wayne counties to follow up cancer and heart suspects found in mass chest x-ray surveys.

The foregoing projects, a part of the department's study of the growing problem of long-term illness in the state, are based on the premise that only through united efforts of the health professions and state and community agencies and organizations can the blend of medical care, hospital and convalescent home service, home nursing care and assistance in rehabilitation be provided which will restore many persons to productive life and aid others to less dependence.

LICENSING OF NURSING HOMES AND HOMES FOR THE AGED

The responsibility for licensing nursing homes and homes for the aged, transferred by the last legislature from the Department of Social Welfare to the Department of Health, is being handled in a newly organized Section of Hospital Services in the department's Division of Local Health Administration. The section also provides consultation to and licenses maternity and nursery sections of hospitals.



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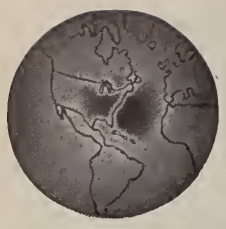
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. NEWS MEDICAL

MICHIGAN AUTHORS

J. Chandler Smith, M.D., Saginaw, is the author of an article entitled "The Inadequacy of Survival Rates In The Evaluation of Cancer Therapy," published in *Surgery, Gynecology & Obstetrics*, September, 1956.

A. Burgess Vial, M.D. and **Walter Callahan, Ph.D.**, Ann Arbor, are the authors of an article entitled "The Effect of Some I^{131}-Tagged Antibodies on Human Melanoblastoma: Preliminary Report," published in the *University of Michigan Medical Bulletin*, July, 1956.

William Umiker, M.D., Ann Arbor, is the author of an article entitled "The Typing of Bronchogenic Carcinoma by Cytologic Smear Examination," published in the *University of Michigan Medical Bulletin*, July, 1956.

T. H. Joos, M.D. and **S. W. Leeper, M.D.**, Ann Arbor, are the authors of an article entitled "Purulent Meningitis in Infancy," published in the *University of Michigan Medical Bulletin*, July, 1956.

James A. McLean, M.D., M. A. Coogan, M.D., and **J. M. Sheldon, M.D.**, Ann Arbor, are the authors of an article entitled "Subcutaneous Emphysema as a Complication of Bronchial Asthma," published in the *University of Michigan Medical Bulletin*, July, 1956.

G. H. Hardie, M.D., and **R. E. L. Berry, M.D.**, Ann Arbor, are the authors of an article entitled "Acute Appendicitis Simulating Right Ureterolithiasis: A Case Report," published in the *University of Michigan Medical Bulletin*, July, 1956.

John L. Ochsner, M.D., Ann Arbor, is the author of an article entitled "The Differential Diagnosis of Obstructive and Non-Obstructive Jaundice Utilizing Serum Alakline Phosphatase Levels," published in the *Uuniversity of Michigan Medical Bulletin*, July, 1956.

Max K. Newman, M.D., George V. Pendy, M.D., A. S. Goldstein, M.D., and **Goodwin S. Katzen, M.S.**, Detroit, are the authors of an article entitled "The Use of Resyl As An Adjunct in the Treatment of Cerebral Palsy," published in the *American Journal of Physical Medicine*, June, 1956.

Max K. Newman, M.D., Detroit, is the author of an article entitled "Electromyography, Its Clinical Application," published in the *Sinai Hospital Bulletin*, June, 1956.

Max K. Newman, M.D., Marjorie Hauff, R.P.T., and **Robert Sims, R.P.T.**, Detroit, are the authors of an article entitled "Ultra Sound and Neurofibromatosis," published in *Transactions of the American Institute of Ultrasonics in Medicine*, March, 1956.

John G. Bielawski, M.D., Detroit, is the author of an article entitled "The Electrocardiogram in Periodic Health Appraisal," published in the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, May, 1956, and condensed in *Current Medical Digest*, September, 1956.

Albert D. Ruedemann, Jr., M.D., Detroit, is the author of an article entitled "Scoliosis and Vertical Ocular Muscle Imbalance," published in the *Archives of Ophthalmology*, September, 1956.

Robert A. Schimek, M.D., Detroit, is the author of an article entitled, "Hypophysectomy for Diabetic Retinopathy. A Preliminary Report," published in the *Archives of Ophthalmology*, September, 1956.

Clifford D. Benson, M.D., and **Laurence M. Linkner, M.D.**, Detroit, are the authors of an article entitled, "The Surgical Complications of Meckel's Diverticulum in Infants and Children. An Analysis of Sixty Cases," published in the *Archives of Surgery*, September, 1956.

Thomas Geoghegan, M.D., and **Brock E. Brush, M.D.**, Detroit, are the authors of an article entitled, "The Mechanism of Intestinal Perforation from Nonpenetrating Abdominal Trauma," published in the *Archives of Surgery*, September, 1956.

E. B. Miller, M.D. and **V. A. Haszczyc, M.D.**, Detroit, are the authors of an article entitled, "Gastric Mucosal Capillaries In The Human," published in the *Archives of Surgery*, September, 1956.

Milton J. Steinhardt, M.D. and **George S. Fisher, M.D., F.A.C.P.**, Detroit, are the authors of an article entitled "Essential Cryoglobulinemia," published in the *Annals of Internal Medicine*, October, 1955.

* * *

A catalogue of health teaching, published recently by the Cleveland Health Museum, gives many examples of exhibits that can be bought or borrowed. Exhibits include many phases on: Human Biology, "Wonders of New Life," Birth Models, Growth and Development, Nutrition, School Health, Medicine and Public Health. The catalogue may be obtained for $1.00 per copy by writing to The Cleveland Health Museum, Cleveland, Ohio.

* * *

Max Kerl Newman, M.D., Detroit, was re-elected Secretary-Treasurer of the American Academy of Physical Medicine and Rehabilitation at their meeting in Atlantic City, September 9, 1956. Dr. Newman also presented a paper entitled "Rehabilitation Problems Associated with Muscular Dystrophy," at the New York State Rehabilitation Hospital, Haverstraw, New York.

* * *

Eighth Annual Michigan Cancer Conference.—On Friday, October 12, at Kellogg Center, Michigan State University, East Lansing, was held the Eighth Annual Michigan Cancer Conference. The speakers included

(Continued on Page 1374)

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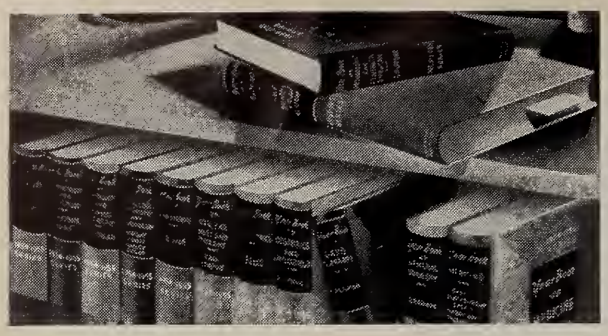
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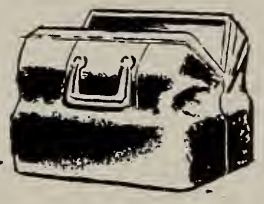


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Arthur H. Kretchmar, M.D., Flint; C. Allen Payne, M.D., Grand Rapids; Richard E. Harrell, M.D., Ann Arbor; Arnold R. Axelrod, M.D., Detroit; and Jack Pickering, Science Writer, *Detroit Times.*

* * *

Max K. Newman, M.D., Detroit, presented a paper entitled "Electromyographic Variations in Myogenic Disease," at the meeting of the American Association of Electromyography and Electrodiagnosis at Atlantic City, September 9, 1956. He also presented a paper entitled "Clinical Experiences With Muscular Dystrophy" at the meeting of the American Congress on Physical Medicine and Rehabilitation at the Ambassador Hotel in Atlantic City on September 14, 1956. In June, 1956, Dr. Newman gave a talk to the staff of the Physical Medicine and Rehabilitation Department, State University of Iowa, on "Peripheral Arterial Circulatory Disturbances: Quantitative Determinations by Means of Multiple Channel Thermister Intramuscular Needle Electrodes."

* * *

J. P. Gray, B.A., M.D., M.P.H., Detroit, Visiting Lecturer on Medical Writing of the American Medical Writer's Association, participated in the program at the Thirteenth Annual Meeting of that group on September 28, 1956, at the Hotel Morrison, Chicago.

* * *

American Board Of Obstetrics And Gynecology.—The next scheduled examinations (Part I), written, and review of case histories for all candidates will be held in various cities of the United States, Canada, and military centers outside the Continental United States, on Friday, February 1, 1957, at 2:00 p.m. Candidates must submit case reports to the office of the Secretary within thirty days of being notified of their eligibility to Part I. Requests for re-examination in Part II must be received prior to February 1, 1957. Current bulletins may be obtained by writing to: Robert L. Faulkner, M.D., Secretary, American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.

* * *

The University of Washington's Institute of Public Affairs is making an eighteen month study of Washington State's physician-sponsored medical service bureau system. The purpose of the study is "to evaluate in detail the effectiveness of the system so it may be used as a model for other areas of the nation." In the survey, the attitudes and opinions of the subscribers and physicians and the records and administration of the service program will be evaluated. The study is financed by a grant of $69,000 by Health Information Foundation of New York because of the manner in which the medical needs of the subscribers are met, while accepting the generally accepted private practice principles.—*New York Times,* August 23, 1956.

* * *

The National Association of Machinists announced that a nation wide system of universal prepaid medical care is to be used in its bargaining program. The Union's executive council learned at their annual meet-

(Continued on Page 1376)

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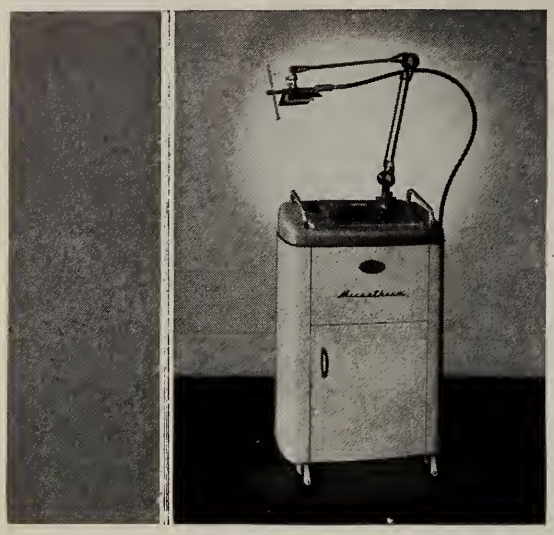
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(Continued from Page 1374)

ing in San Francisco that 86 per cent of their members are covered by some form of negotiated health insurance.

* * *

National Medical Library.—Ceremonies on October 1, 1956, transferred the Armed Forces Medical Libraries into the National Library of Medicine, and transferred control to the Department of Health Education and Welfare. The directorship of the world's greatest medical library will continue at present to be invested in Colonel Frank B. Rogers, who has been its head for several years.

* * *

The American Academy of Physical Medicine and Rehabilitation has elected the following officers for the year 1956-57: Murray B. Ferderber, M.D., Pittsburgh, president; George D. Wilson, M.S., Asheville, North Carolina, president-elect; Louis B. Newman, M.D., Chicago, vice-president; Max K. Newman, M.D., Detroit, secretary-treasurer; and Dorothea Augustin, Chicago, assistant secretary-treasurer.

* * *

The Atomic Energy Commission has announced forty-eight unclassified, one-year science research awards or contracts, twenty-one of which are new. Three came to Michigan. At the University of Michigan, T. A. Bernstein will receive $8,846 to study the effects of radiation on the intermediary metabolism of mammalian skin. Parke, Davis and Company, Detroit, J. K. Weston, investigator, was given $50,000 to study "Factors Elaborated by Animal Tissues Which Stimulate Rate of Regeneration of Hematopoietic Organs of Animals Exposed to Total Body Irradiation with Gamma Rays." At Michigan State University, J. E. Gunckel, investigator, was awarded $5,874 to study the "Role of Various Aliphatic Acids in Pyrimidine Biosynthesis."

* * *

Mediclinics of Minnesota announce their second annual refresher courses will be held in Fort Lauderdale, Florida, March 4 to 14, 1957. The Floridian Academy of General Practice is the local sponsor, and the National Academy has alloted thirty-two credit hours of formal postgraduate study, category I. Registration is limited to 300. The faculty will leave Chicago, March 2, on the Pennsylvania's "Southwind." For further information write Mr. J. R. Brown, 720 Rand Tower, Minneapolis.

* * *

Developments in Atomic Energy Field.—New progress is being made in the application of atomic energy to medicine. The Atomic Energy Commission, in its twentieth semiannual report, announces that during the last six months new methods have been developed for using atomic energy products and techniques to treat cancers. Research also is being carried on at various schools, hospitals and institutions on the effects of radiation on living creatures, and studies of ways to dispose of waste material have yielded promising new knowledge.

The AEC also described a project for construction at the Brookhaven National Laboratory on Long Island of the first reactor designed exclusively for medical

(Continued on Page 1378)



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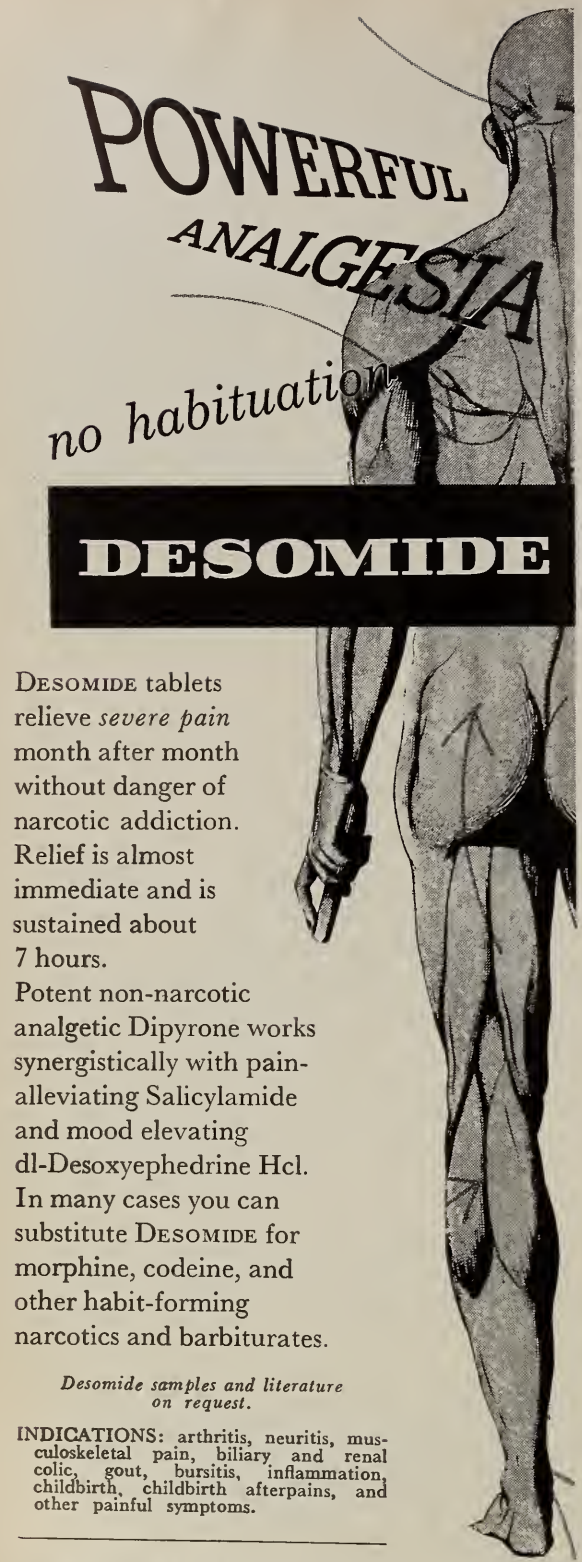
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(Continued from Page 1376)

research and treatment. It is designed to insure wider medical application of neutrons, flexibility of treatment and availability of special short-lived radioisotopes. Completion is due in 1958, AEC said. The report is available from the Atomic Energy Commission.

* * *

Midwinter Seminar in Ophthalmology and Otolaryngology.—The University of Florida is again conducting a seminar on ophthalmology on January 14, 15, 16. 1957, in Miami Beach. A Michigan doctor, **Cecil W. Lepard** of Detroit, is on the staff. The otolaryngologic seminar will follow on January 17, 18, 19, 1957.

* * *

A Conference on Rehabilitation Nursing will be held in Detroit, November 30, 1956, in the Henry Ford Hospital auditorium, 2799 West Grand Boulevard, at 9:00 a.m. The general chairman will be Mrs. A. Gertrude Taylor, B.S., R.N., of Detroit. The keynote speaker is **Luther R. Leader, M.D.,** president of the Wayne County Medical Society. Other speakers include: Alice B. Morrissey, B.S., R.N., "Rehabilitation in General Hospital"; Sylvia Currah, B.S., R.N., "Demonstration of Rehabilitation Techniques"; Eleanor Anderson, R.N., consultant of the National League for Nursing, "Rehabilitation Nursing in Public Health and Community." Miss Alma Kyle, B.S., R.N., and C. Robert Dean, M.D., and Russell S. Blanchard, M.D., will also speak.

* * *

The Medical Dollar.—According to *Health Economics Reports,* the dollar expended for health care is divided as follows: To the physician, twenty cents; the hospital, forty-eight cents; medicine, nine cents; dentist, eleven cents; and all others, twelve cents.

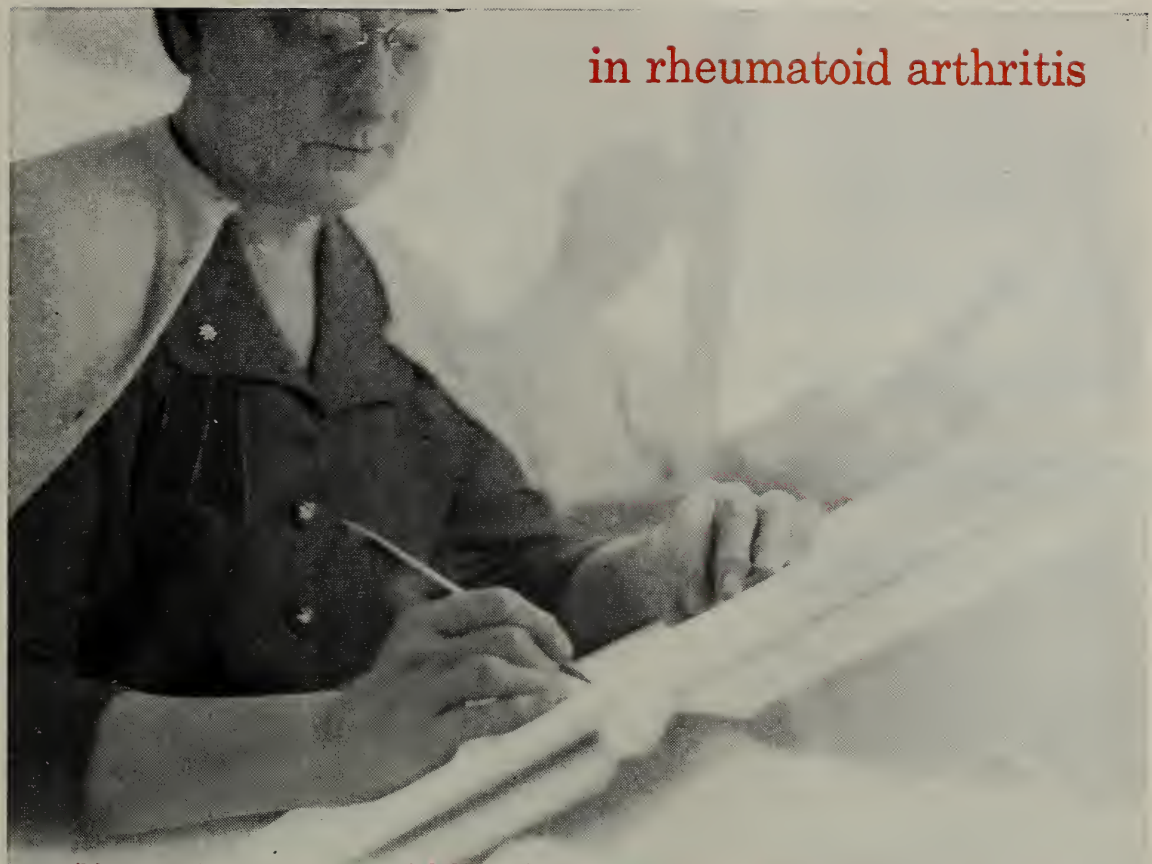
* * *

During 1955, allowing for persons having double coverage, approximately 107.6 million persons in the United States had hospital protection. 50,726 of these had Blue Cross, 50,645,000 had commercial companies, and 4,500,000 belonged to miscellaneous plans. Approximately 5,241,000 had major medical coverage of some form.

* * *

What Labor Wants.—In a letter to the *New York Times* (August 17, 1956) George J. Levine, president of the union of state employes, AFL-CIO, outlined what he believes should be the minimum standards for a health insurance program for New York State employes. His points are: (1) "All medical, surgical and hospital expenses should be covered, including home and office visits and minor as well as major conditions. (2) A choice of plans should be offered, dependent upon whether an employe prefers a 'free choice of physician' plan or a group medicine plan. (3) Those plans which are most desired, but which are at present limited to certain localities, should be expanded to cover the entire state. (4) The state should bear at least one-half the insurance cost, and the state should itself administer the plan through the Health Insurance Board—both insurance companies and employe organizations being limited to advisory functions only."

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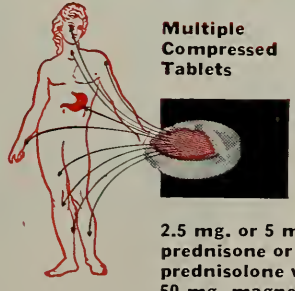


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2.5 mg. or 5 mg. prednisone or prednisolone with 50 mg. magnesium trisilicate and 300 mg. aluminum hydroxide gel.

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All the benefits of the "predni-steroids" plus positive antacid action to minimize gastric distress.

References: 1. Boland, E. W., *J.A.M.A.* 160:613 (February 25) 1956. 2. Margolis, H. M. *et al.*, *J.A.M.A.* 158:454 (June 11) 1955. 3. Bollet, A. J. *et al.*, *J.A.M.A.* 158:459 (June 11) 1955.

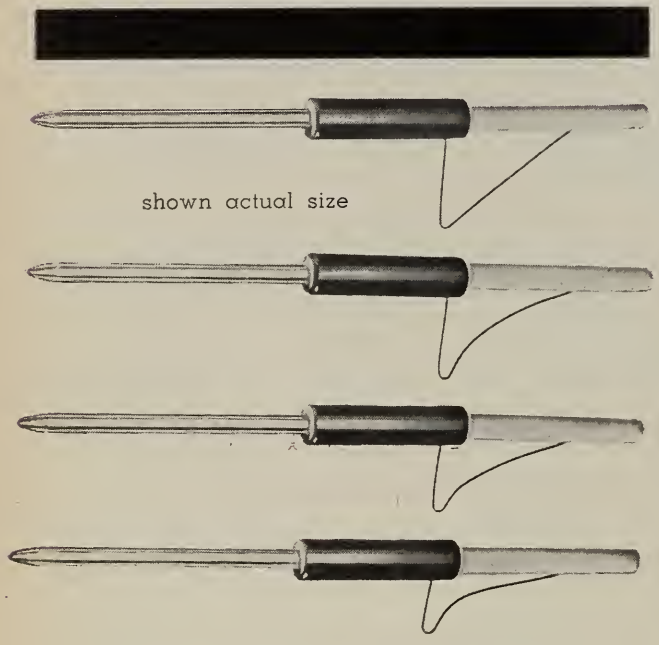
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**Described in his paper which will be sent on request*

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(Continued from Page 1378)

A. L. Chapman, M.D., is the new chief of the Division of Special Health of the Public Health Service. He succeeds Stewart E. Miller, M.D., now on leave of absence to serve as Director of the University of Michigan Institute of Industrial Health.

* * *

The Defense Department has announced an October draft call for 300 physicians for service in the navy, for duty later this year.

* * *



Last year in Michigan, tuberculosis caused 477 deaths—more than all other infectious diseases combined. These were deaths which probably could have been prevented. Too much tuberculosis is found too late. In Michigan in 1955, 75 per cent of the new cases of active reinfection pulmonary tuberculosis were in advanced stages when first reported, 40 per cent were moderately advanced, and 35 per cent were far advanced. These cases, missed in the minimal stage, numbered 2,025. Tuberculosis bears a need for constant vigilance. A periodical chest x-ray could prevent many tuberculosis fatalities.

MICHIGAN TUBERCULOSIS ASSOCIATION

* * *

The Sixth Annual Symposium on Blood will be held at Wayne State University, Detroit on January 18 and 19, 1957. Beginning at 9 A.M., papers will be presented all day Friday in the auditorium of the College of Medicine, 645 Mullett Street. Facilities for a group dinner and social gathering are being reserved for Friday evening at a Detroit restaurant famous for fine food. The scientific program will be concluded Saturday noon. Ample time is being allowed for the audience to discuss the contributions of the invited speakers. Walter H. Seegers is Chairman of Arrangements.

* * *

The Atomic Energy Commission has announced certain reductions in prices of radioactive units. Iodine^{131} is being used routinely in 1,100 medical institutions for diagnosis and treatment of thyroid diseases, and in the past decade approximately 500,000 persons in the United States have undergone administrations of radioactive isotopes for medical purposes.

* * *

Hospital Design Reform.—Secretary of the Department of Health, Education, and Welfare, Marion B. Folsom, has appointed a special advisory committee to work with hospitals to make them more functional, more practical, more efficient, and less expensive. His special assistant, Lowell T. Coggeshall, M.D., spoke on this subject at the annual meeting of the American Hospital Association, in Chicago in September. The Secretary's objective is architectural and organizational reform. Chairman of the group is Russell Nelson, M.D., Director of Johns Hopkins Hospital; on the com-

(Continued on Page 1382)

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to help children eat more, grow more!



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(Continued from Page 1380)

mittee with him are Ray E. Brown, Chicago, retiring president of the American Hospital Association, Robert Eiman, M.S., St. Louis, Missouri, Charles G. Russell, Montclair, N. J., Ruth Sleeper, Boston, and Marion J. Wright, Detroit.

According to Dr. Coggeshall:

"Most hospitals are built and operated today to provide the maximum possible medical care involving complex and expensive equipment and personal services for each patient. Some patients, however, do not need such expensive equipment or services. If some sections of general hospitals could be designed and operated specifically to serve persons who have only limited needs, the cost of hospital care for these patients could be reduced substantially."

Light housekeeping and self-service at mealtime by ambulatory patients, feasibility of part-time hospitalization, provision of limited hospital services to patients in their homes— these are a few of the subjects to be considered by the committee. Some hospitals in the United States, notably the newer ones in the Kaiser network on the West Coast, already have introduced the money- and labor-saving innovations which Secretary Folsom and Dr. Coggeshall recommend.

* * *

The American Medical Association has been vitally interested in the training in American hospitals of physicians educated abroad, and is a participating member of the newly-founded evaluation service for foreign medical graduates. A total of 6,033 physicians from eighty-four countries are at present being trained in American hospitals as interns or residents.

The AMA has operated, developed and maintained the valuable "Standard Nomenclature of Diseases and Operations," a publication having a large foreign distribution and the only international publication of its type.

The "Quarterly Cumulative Index Medicus," which is compiled by the AMA library staff and provides pertinent information on medical periodical literature and books, goes to 1,314 foreign subscribers and, in addition, can be found in almost any medical library abroad.

AMA medical films are loaned to medical societies all over the world. Through special arrangement with the U.S. State Department, the AMA once loaned more than forty motion pictures to physicians in Mexico City. The director of that bureau, Ralph Creer, has addressed such distinguished organizations as the First World Conference on Medical Education in London, the International Film Festival at Edinburgh, and international medical meetings in Mexico. A special program of foreign-made films will be an added feature at the annual meeting of the AMA when it is held in New York in June, 1957.

* * *

The Bureau of Medicine and Surgery of the U.S. Navy, on August 31, 1956, celebrated the 114th anniversary of its founding. There are now on active duty 550 physicians certified by the various American Boards, and 337 physicians in residency training.

(Continued on Page 1384)



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"anxiety and apprehension
give way to
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When added to premedication, 'Thorazine' calms apprehensive, tense patients, facilitates induction and intubation, decreases reflex irritability, minimizes emergence excitement, and "markedly inhibits postoperative vomiting."[1]

1. Mathews, Morris and Moyer: Am. Pract. & Dig. Treat. 6:360 (Mar.) 1955.

'Thorazine' is available in ampuls, tablets and syrup (as the hydrochloride), and in suppositories (as the base).

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Tablets

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- basically **different** in chemical structure, extending the therapeutic choice in organic mercurials

DOSAGE: 1 to 3 tablets daily as required.

SUPPLIED: As orange tablets, in bottles of 100 and 1000. Also available—

CUMERTILIN Sodium Injection, 1- and 2-cc. ampuls, in boxes of 12, 25, and 100; and 10-cc. vials, individually and in boxes of 10 and 100.

1. Pollock, B. E., and Pruitt, F. W.: Am. J. M. Sc., 226:172, 1953.

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(Continued from Page 1382)

The Commerce Department has reported that $11 out of every $100 spent by Americans for consumer services goes for health care and death expenses. In 1955 expenditures for consumer services totaled $91.2 billion. Of this amount, $10.1 billion was for "medical care and death expenses." (Hospitalization and drugs as well as doctors' bills are classified as medical care.) The only services which exceeded this category were housing, household operation, and personal business, which were listed as $31.2 billion. $13.6 billion, and $12.5 billion respectively. The Commerce Department states that between 1929 and 1955 consumer expenditures for medical care and death expenses increased 260 per cent. This represents the greatest increase among all categories of expenditures for consumer services.

* * *

Reports from the Department of Social Welfare of the state show that 25 per cent of their clientele, Old Age Assistance, are over eighty years of age. Twenty per cent are beneficiaries because of the inadequacy of Social Security. They are receiving minimal amounts, the lowest being $35 per month, and must be helped.

* * *

During the depression years of 1929 to 1939 most businesses survived.

* * *

"One of the best safeguards against inflation is the ownership of good income producing real estate or even undeveloped land that has development possibilities. The best safeguard against deflation is the possession of 'liquid assets'—cash or short term government notes."

* * *

Major General Paul R. Robinson is being detached from command of Letterman General Hospital, San Francisco, and will have charge of the Defense Department's medical care program for dependents of servicemen. In this capacity he will have supervised the screening and approval of medical fees and hospital charges, the signing of contracts for payment of bills, mediation of grievances, and making rules of procedure.

* * *

The United Mine Workers Welfare and Retirement Fund was established in 1949. Since that time it has spent $293,756,004 for medical and hospital care benefits. In the fiscal year ending June 30, 1956, it spent $47,502,629, paying for 1,530,430 hospital days for 89,513 individuals, and 1,660,030 outpatient visits. There were 825,126 consultations including specialists. And at the year's close there was an unexpended balance of $130,100,000.

* * *

Ubiquitous hosts who showered hospitality upon the guest essayist at the 1956 MSMS Annual Session in Detroit, were: C. P. Anderson, M.D., Detroit; Ivan C. Berlien, M.D., Detroit; John G. Bielawski, M.D., Detroit; Robert Burns, M.D., Detroit; Roswell G. Burroughs, M.D., Detroit; Charles E. Darling, M.D., Detroit; R. J. Elvidge, M.D., Detroit; Hugh M. Fuller, M.D., Detroit; F. E. Greifenstein, M.D., Detroit; Philip

(Continued on Page 1386)

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(Continued from Page 1384)

J. Howard, M.D., Detroit; E. A. Irvin, M.D., Dearborn; E. R. Jennings, M.D., Detroit; J. A. Johnston, M.D., Detroit; W. S. Jones, M.D., Menominee; Harold H. Lampman, M.D., Detroit; William A. Lange, M.D., Detroit; Alfred M. Large, M.D., Detroit; Robert P. Lytle, M.D., Detroit; Clarke M. McColl, M.D., Detroit; William B. McIntyre, M.D., Detroit; Elmer B. Miller, M.D., Detroit; Gordon B. Myers, M.D., Detroit; James A. Olsen, M.D., Detroit; Philip S. Peven, M.D., Detroit; John W. Rebuck, M.D., Detroit; Francis P. Rhoades, M.D., Detroit; Arthur E. Schiller, M.D., Detroit; F. G. Swartz, M.D., Detroit; Andrew G. Wilson, M.D., Detroit.

The MSMS Council placed upon its minutes a vote of thanks to these physicians who helped tangibly to make the recent Annual Session the greatest in MSMS history.

* * *

WJBK, radio and television pioneers of Detroit, formally dedicated their new studios and offices at 7441 Second Boulevard on September 18.

Congratulations, WJBK, and continued success in your worthy work of public education and information.

* * *

The Michigan Health Council was presented with the American Society of Association Executives Award on its pioneering M.D. Placement Program, at the 1956 ASAE meeting in New York City on September 20.

The Michigan Health Council has operated the M.D. Placement Program since 1953 under the guidance of the Michigan State Medical Society. During that period, it has been responsible for placing more than 200 M.D.'s in Michigan communities needing the services of a doctor of medicine.

* * *

The Shapero School of Practical Nursing was dedicated September 9, 1956. in Detroit. This pilot model, which will train fifty students a year, is a two-story brick and glass addition to Sinai Hospital at 6767 W. Outer Drive, Detroit. The school will be financed by a $500,000 grant from the Nate S. and Ruth B. Shapero Foundation and the Cunningham Drug Company Foundation. The key to the new building was presented by Nate S. Shapero who stated that the new school is the result of a 1954 study conducted under the auspices of the Cunningham Drug Foundation, which showed a critical need "for expansion of practical nurse training."

* * *

The Sister Elizabeth Kenny Foundation is launching a new program of providing post doctoral research scholarships in the fields of neuromuscular diseases. Kenny Foundation Scholars will be appointed annually with each grant providing a stipend for a five year period at the rate of $5,000 to $7,000 a year depending upon the Scholar's qualifications. For information write E.

(Continued on Page 1388)

Conveniently Located in Grand Rapids

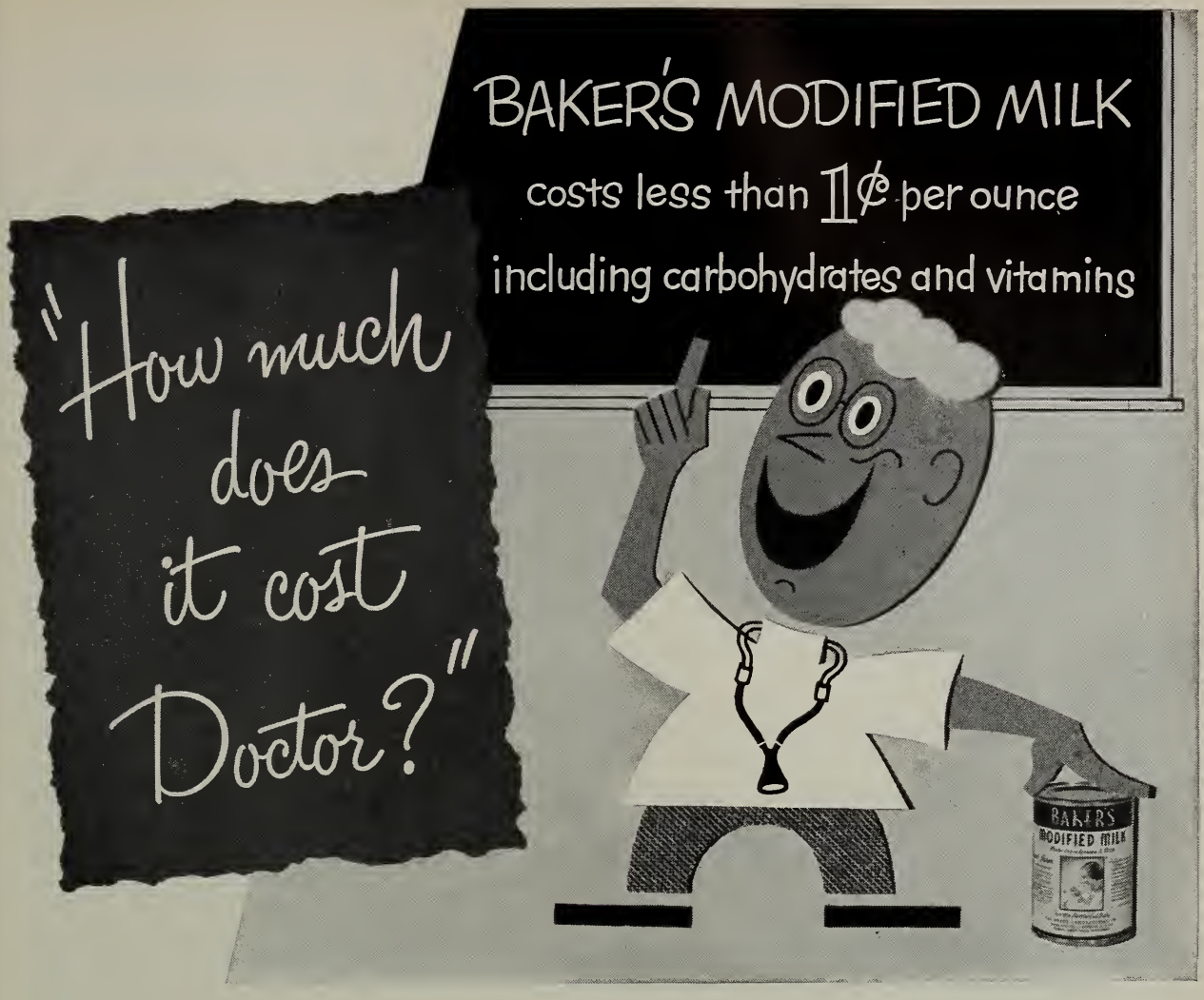


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(Continued from Page 1386)

J. Huenekens, M.D., Medical Director, 2400 Foshay Tower, Minneapolis 2, Minnesota.

* * *

A symposium on fundamental cancer research will be sponsored by the University of Texas M.D. Anderson Hospital and Tumor Institute of Houston on March 7-8-9, 1957. For program, write the University's Editorial Office, Texas Medical Center, Houston 25, Texas.

* * *

A total of 819 delegates attended the Ninth Annual Meeting of the American Association of Blood Banks in Boston on September 3-5. E. E. Muirhead, M.D., of Dallas, was chosen President of the AABB.

* * *

The annual Bahamas Medical Conference will be held in Nassau, December 1-15, 1956, at the Princess Margaret Hospital. Special reduced hotel rates have been arranged for the participants in the Conference and their families. For information and program, write B. L. Frank, M.D., Suite 1-3, Fourth Floor, 550 Fifth Avenue, New York 36, N. Y.

* * *

The Ford Foundation, on September 16, announced grants totaling $21,750,000 to strengthen instruction in the 44 privately-supported medical schools now in operation in the United States. The grants are in the amount of $500,000 to each of forty-three four-year institutions and $250,000 to the two-year medical school at Dartmouth College, Hanover, New Hampshire.

* * *

Crittenton General Hospital is the new name of the institution (formerly known as Florence Crittenton Hospital) located at 1550 Tuxedo Avenue, Detroit 6. The change was made by the Board of Trustees, effective October 1, 1956.

* * *

The Milwaukee Academy of Medicine invites all MSMS members to its Symposium of Immunology to be held at Marquette University (Brooks Memorial Union) December 1, 1956. No registration fee. For full information and program, write H. J. Lee, M.D., 561 North Fifteenth Street, Milwaukee, Wisconsin.

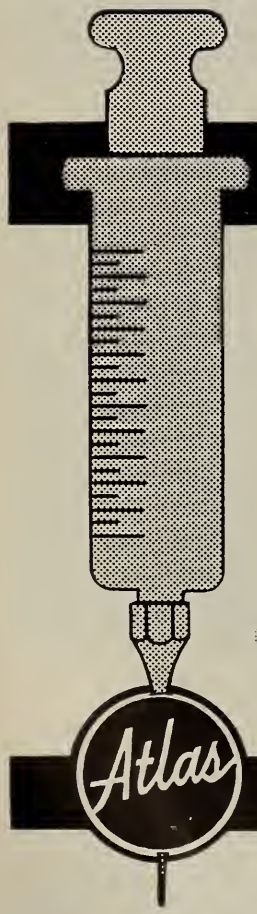
* * *

Henry S. Brown, M.D., retired October 1 from his duties as medical consultant for the Michigan Bell Telephone Company at Detroit. A Past President of the Industrial Medical Association, Dr. Brown served Michigan Bell for thirty-two years. Before joining Michigan Bell in 1924, Dr. Brown had been industrial surgeon for General Accident Insurance Company in Detroit; prior to that he was in private practice in Detroit.

* * *

Seward E. Miller, M.D., was appointed the new

(Continued on Page 1390)



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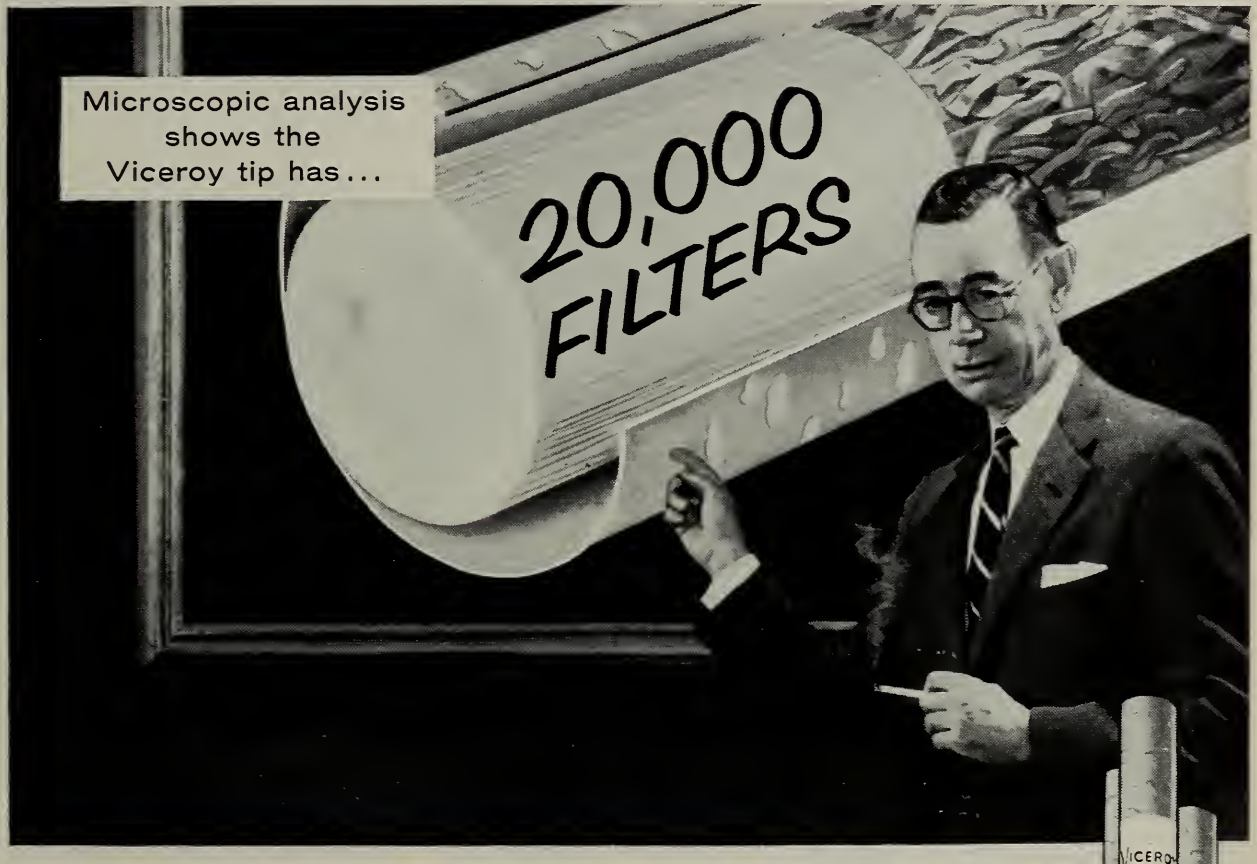
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(Continued from Page 1388)

director of the University of Michigan's Institute of Industrial Health on September 1. Dr. Miller was chief of the Division of Special Health Services of the Bureau of State Services (HEW) for the past two years. He is editor of the Textbook of Clinical Pathology, now in its fifth edition.

* * *

Thomas M. Rivers, M.D., of New York City, has been appointed Medical Director of the National Foundation for Infantile Paralysis, succeeding Hart E. Van Riper, M.D., who left the Foundation on October 31 to become Medical Director of Geigy Pharmaceuticals of Ardsley, New York.

Dr. Rivers was formerly Vice President of the Rockefeller Institute for Medical Research.

* * *

Max K. Newman, M.D., Detroit, has been elected Secretary-Treasurer of the American Academy of Physical Medicine and Rehabilitation.

* * *

The Michigan State Medical Society headquarters building in Lansing was photographically featured in *Association Buildings and Offices,* a new publication of the Chamber of Commerce of the United States, issued October 1. The survey summary shows that five out of every six U. S. trade and professional associations rent their headquarters office space. One has purchased or constructed a building of its own. But one-fifth of those renting would like to move into a self-owned building. And one-fourth of those who want their own quarters have definite plans to acquire them. The Chamber of Commerce of the U. S. survey covered response of 325 local, state, and national associations whose gross annual incomes ranged from below $25,000 to $500,000 or more.

* * *

Wm. J. Burns, MSMS Executive Director, addressed the National Association of Dental Laboratories at its annual meeting in Detroit on October 13. Mr. Burns' subject was "The Relationship of the Medical Profession to the Medical Laboratory."

* * *

John R. Rodger, M.D., Bellaire, longtime Chairman of the MSMS Committee on Prevention of Highway Accidents, has been appointed a member of the AMA Traffic Committee.

Congratulations, Dr. Rodger!

* * *

The most unfortunate feature of tuberculosis in elderly persons is that it usually has no distinctive symtom. The cough, sputum, dyspnea, slight dyspepsia and a general feeling of lassitude are all put down to increasing years. It is only when sudden pain or

(Continued on Page 1392)

MONODRAL® WITH MEBARAL®



ANTICHOLINERGIC • SEDATIVE

in peptic ulcer management

- relieves pain promptly
- reduces tension safely
- tranquilizes without dulling
- well tolerated
- promotes healing
- maintains anacidity for hours
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MONODRAL with MEBARAL—the "psychovisceral stabilizer"—provides for patients with ulcer and gastro-intestinal spasm an effective barrier against the impact of environmental stimuli . . . controls gastric hypersecretion and hypermotility for three and one half to five hours.*

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MEBARAL.....32 mg.

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**References and clinical trial supplies available on request.*



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Karo—a balanced mixture of dextrins, maltose and dextrose—enables the feeding of larger amounts of total carbohydrate than is possible with a single sugar such as lactose or sucrose. Karo is double rich in calories and, more importantly, it is easily digested, completely utilized and well-tolerated; even by prematures and newborns.

From the standpoint of the physician, Karo permits easy adjustment of formula and safe transition from liquid to solid food. Mothers appreciate the ease of making formulas with Karo, plus its ready availability and economy. Light or dark Karo syrup may be used interchangeably since each yields 120 calories per ounce (2 tablespoons).



1906 • **50th ANNIVERSARY** • 1956
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(Continued from Page 1390)

hemoptysis occurs that the patient becomes alarmed and seeks advice. It is then that advanced, old-standing disease is found and the damage done from the wide distribution of tubercle bacilli from this focus of infection over a number of years can be visualized.—F. R. G. Heaf, M.D., *Journal of the Royal Institute of Public Health and Hygiene,* Nov., 1955.

* * *

The Price of Free Medicine.—Last year, the British National Health Service paid one million pounds ($2,800,000) for bottles and other containers to be used for drugs and medicine. In contrast, the grant for research in mental health was a mere 27 thousand pounds ($75,600).

These figures illustrate the most damaging though least heeded effect of socialized medicine. Not even Mr. Bevan himself denies that the British people are heavily overindulging in nostrums of dubious value.

At the same time, nearly half the hospital beds in Britain are occupied by mental patients and many would-be voluntary patients must be refused admission. Yet not one new hospital of any kind has been opened in Britain since the start of the Health Service, nearly eight years ago.

At a time when both medical advance and the challenge to medicine are undergoing great and dramatic changes, British practice is being fossilized in attitudes as out of date as the wooden stethoscope.

—From *The Freeman*



Otto O. Beck, M.D., Birmingham, Past President of the Michigan State Medical Society, has been selected by the MSMS Council as General Chairman of Arrangements for the 1957 Michigan Clinical Institute to be held at the Sheraton-Cadillac Hotel, Detroit. March 13-14-15.

The complete program of the 1957 MCI will be published in the December number of JMSMS.

* * *

The Florida Medical Association dedicated its new building at 735 Riverside Drive, Jacksonville, Florida, at a ceremony on September 15. Taking part in the ceremony were Francis H. Langley, M.D., of St. Petersburg, President; Wm. C. Roberts, M.D., Panama City, President-Elect: and John D. Milton, M.D., Miami, immediate Past President. The FMA building is of modern design in sandstone—with a functional arrangement of offices and auditorium, all on one floor.

* * *

Wm. J. Burns, MSMS Executive Director, addressed the Forty-third Annual Convention of the Michigan Hotel Association in Grand Rapids on September 21. Mr. Burns was a member of a panel discussing "How to Secure and Service Group Business," the moderator

(Continued on Page 1394)

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Why wine in Anorexia?

It has been popularly held that various types of alcoholic beverage are appetite stimulants, but objective laboratory investigations have clearly shown that alcohol itself, under controlled conditions, acts as a depressant to appetite.[1, 2]

Wine, however, the classic beverage of moderation, used as an aperitif, has been found to exert a profound stimulating effect on appetite and on the ability of both normal and anorexic patients to detect faint odors.[3] Goetzl and his co-workers have attributed this effect to such wine components as tannic acid, tartaric acid and acetic acid.[4, 5]

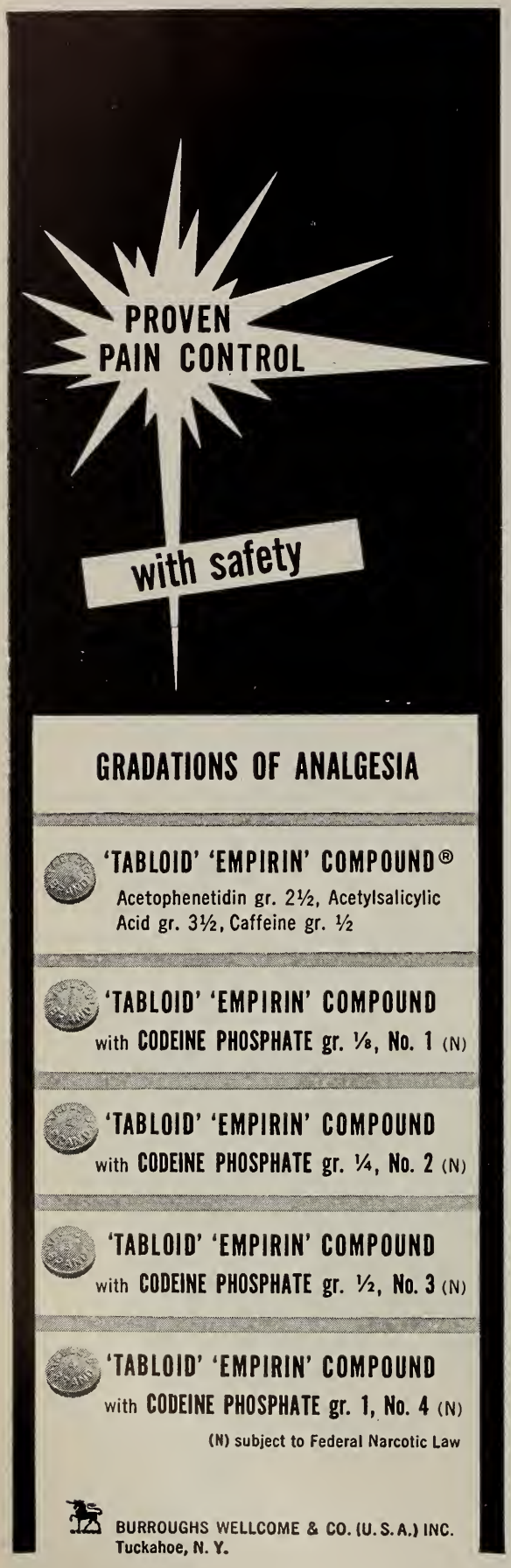
In actual clinical trials, Goetzl has reported the successful use of dry wines in increasing not merely the appetite, but also the food intake of patients suffering from anorexia. In one study on the appetite-stimulating action of wine, the average daily caloric intake in a substantial group of anorexic patients was increased from an average of 773 to 1228 calories.[6]

The above excerpts are taken from the brochure "Uses of Wine in Medical Practice" which describes the results of recent laboratory and clinical research on the medical attributes of wine. Herein are reported the latest findings on the value of wine as a stimulant to flagging appetite, as an aid to digestion, as a vasodilator, as a daytime and night-time sedative.

A copy of the brochure is available to you—at no expense—by writing to: Wine Advisory Board, 717 Market Street, San Francisco, California.



1. Margulies, N.R.; Irvin, D.L., and Goetzl, F.R.: Permanente Found. M. Bull. **8**:1 (Jan.) 1950.
2. Irvin, D.L.; Ahokas, A.J., and Goetzl, F.R.: Permanente Found. M. Bull. **8**:97 (Oct.) 1950.
3. Goetzl, F.R.: Permanente Found. M. Bull. **8**:72 (April) 1950.
4. Irvin, D.L., and Goetzl, F.R.: Permanente Found. M. Bull. **9**:119 (Oct.) 1951.
5. Irvin, D.L.; Durra, A., and Goetzl, F.R.: Am. J. Digest. Dis. **20**:17 (Jan.) 1953.
6. Goetzl, F.R.: A Note on the Possible Usefulness of Wine in the Management of Anorexia, unpublished.



(Continued from Page 1392)

being Mark A. Schmidt, General Manager of the Sheraton-Cadillac Hotel, Detroit. Other panelists were H. E. Boning, Jr., Executive Vice President of Detroit Convention Bureau; Wm. H. Edwards, Manager, Statler Hotel, Detroit; Jerry Moore, General Manager, Fort Shelby Hotel, Detroit, and Creight Holden, Owner, St. Clair Inn, St. Clair.

* * *

The Michigan State Medical Society is one of six co-sponsors of a new cancer manual for high school students entitled "The Story of Cancer for High Schools." This beautifully illustrated brochure of seventy-two pages is an easy-to-read story of cancer in two parts: (a) Facts About Cancer and Its Control; and (b) Aids and Projects for Classroom Study. Thirty-one illustrations and four tables, together with suggestions to the high school teacher and a letter of approval from the Michigan Department of Public Instruction, Lansing, are included in the new booklet.

WHAT THEY SAID ABOUT THE 1956 MSMS ANNUAL SESSION

Edward P. Cawley, M.D., Charlottesville, Virginia (guest essayist). . . . "I was tremendously impressed with the arrangements made by MSMS for the guest speakers. I can honestly say that I have never attended a meeting where all details were handled so smoothly."

A. C. Corcoran, M.D., Cleveland, Ohio (guest essayist). . . . "Thank you very much for your gracious hospitality during my visit to the Michigan State Medical Society Annual Session. Everyone was most gracious."

J. H. Means, M.D., Boston, Massachusetts (guest essayist). . . . "Truly I enjoyed the MSMS meeting Michigan State Medical Society and I am gratified for the honor in having been invited to take part in this program. I assure you that everything went with the utmost smoothness as far as I was concerned."

Herbert S. Rattner, M.D., Chicago, Illinois (guest essayist). . . . "Truly I enjoyed the MSMS meeting as much as any state meeting I have ever attended and I was amazed that there was such a large attendance on the last day. It bespeaks excellent organization."

T. F. Schlaegel, Jr., M.D., Indianapolis (guest essayist). . . . "I enjoyed my stay with you immensely. I shall never forget the gracious hospitality of MSMS."

Warren E. Wheeler, M.D., Columbus, Ohio (guest essayist). . . . "It was indeed a pleasure to be asked to come and speak before your meeting again. I enjoyed my trip immensely; I was glad to see you and a number of other old friends during my short stay."

John E. Murphy, M.D., Detroit (moderator of a panel). . . . "It was a privilege and a pleasure to appear on the program and I feel the heart symposium was well received."

Russell B. Roth, M.D., Erie, Pennsylvania (speaker at September 27 dinner). . . . "I want to congratulate you on the way you make visiting physicians feel

welcome in Michigan. I thoroughly enjoyed my brief time with you and I hope my lecture created the desired effect on you all."

L. O. Simenstad, M.D., (President, State Medical Society of Wisconsin). . . . "I wish to thank you and the whole Michigan State Medical Society for the very fine reception you gave us at your recent Annual Session. Dr. G. B. Saltonstall did an excellent job as host and it seemed as though everyone else was really interested in our enjoying the meeting. Will you please convey my thanks to all of my new friends in your state."

L. S. Reavley, M.D., (President-Elect, Illinois State Medical Society). . . . "I want to express my appreciation to you for your invitation to attend a session of the Michigan State Medical Society. I thorougly enjoyed my trip to Detroit and I am sure I learned many things from the sessions of your Medical Society that will be of help to me in the future. May I express my appreciation for your hospitality."

William S. Reveno, M.D., Detroit (Chairman of MSMS Preventive Medicine Committee). . . . "The MSMS Session was in my estimation a resounding success and stands as a tribute to Michigan's ability to put on a grand show!"

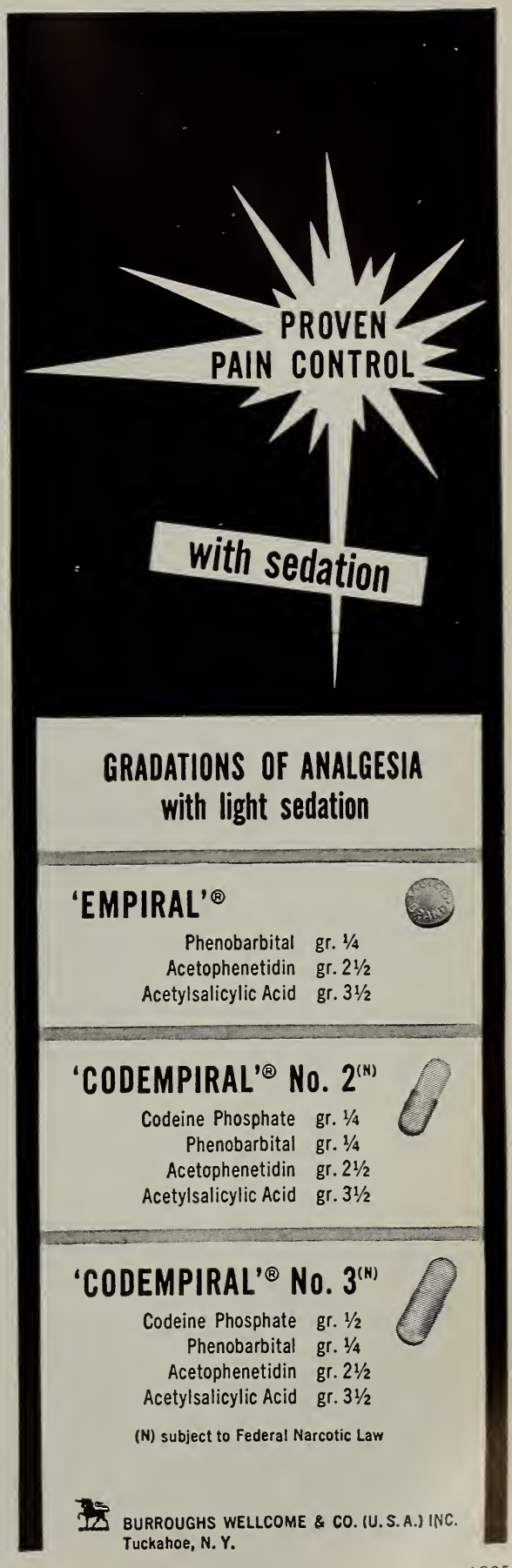
Andrew K. Gillies, Toronto, Ontario (Executive Secretary, Ontario Medical Association). . . . "Our President, Dr. J. C. C. Dawson, and I were very pleased to have the opportunity to sit in on your sessions, particularly those of the House of Delegates. The problems of your Society run a very close parallel to those of the Ontario Medical Association. It was therefore very interesting to hear your discussions on the common problems. I wish to express our thanks to you for the excellent accommodation placed at our disposal and would ask you to extend these thanks to the MSMS Council."

Roy T. Ragatz, Madison, Wisconsin (Assistant Secretary, State Medical Society of Wisconsin). . . . "I am very appreciative of the many courtesies extended to me and the opportunity of observing what is generally regarded as the best state medical meeting held in the United States. I can readily understand why you have obtained this reputation, and I was particularly impressed with the many laudatory comments of exhibitors regarding your meeting and the way in which you handle the exhibit end of the show."

L. A. Calkins, M.D., Kansas City, Kansas (guest essayist). . . . "I enjoyed participating in your meeting very much, and it was a pleasure to see and visit with some of my Detroit friends again."

F. R. Keating, Jr., M.D., Rochester, Minnesota (guest essayist). . . . "I enjoyed my trip to Detroit very much and was very grateful for the fine reception and particularly for the superb hospitality I received. I was especially indebted to Doctor Bill Lang who was my host. He went way out of his way to take good care of me and I cannot think of any way in which my trip might have been made more enjoyable."

Leon Schiff, M.D., Cincinnati, Ohio (guest essayist) . . . "First let me again thank you for the honor of



having been invited to present the William Beaumont Memorial Lecture and for the certificate which was presented to me upon its completion. For the latter I am particularly grateful. Next let me thank you for the overwhelming hospitality shown by my host, Dr. Elvidge and by Dr. Connelly. It is needless to add that I enjoyed immensely my visit to Michigan."

Averill A. Liebow, M.D., New Haven, Conn. (guest speaker). . . . "Your statements regarding Michigan hospitality were certainly not exaggerated. I am appreciative of the honor of speaking to the Michigan State Medical Society, and to the group in Pathology. I am particularly grateful to Dr. John Rebuck, who was a most gracious host."

G. S. Fitz-Hugh, M.D., Charlottesville, Virginia (guest essayist). . . . "I wish to take this opportunity of thanking you for the invitation to participate in the recent meeting of the Michigan State Medical Society. I enjoyed the meeting a great deal. Also, I would like to congratulate you upon the fine manner in which the meeting was conducted. The organization left little, if any, chance for error, and the detailed instructions to the speakers must have been appreciated by all, as they were by me. Thank you again for all of your courtesies."

Perry S. McNeal, M.D., Philadelphia, Pa. (guest essayist). . . . "It was certainly a pleasure to be with you and your group. The evidences of your thoughtfulness were apparent at every turn."

Dwight E. Clark, M.D., Chicago, Illinois (guest essayist). . . . "I can truly say that I thoroughly enjoyed my short visit to Detroit, and the hospitality of the Michigan State Medical Society was wonderful. You certainly had a very fine and well organized meeting, and I wish to extend my sincere compliments to the Society. It was one of the best state meetings that I have ever had the pleasure of either attending or participating in."

Morton Hack, Hack Shoe Company, Detroit (exhibitor). . . . "In all the years that I have been attending the medical meetings as an exhibitor, I have never enjoyed the response which was evident at this recent meeting. Not only was the attendance the greatest in history, but the interest, the intelligent interest, was most rewarding to all of the exhibitors with whom I spoke. As usual, the arrangements were excellent and there was a minimum of confusion."

* * *

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Assisted by Michigan Health Council	
Paul G. Stein, M.D.	Marquette
Richard W. Deatrick, M.D.	Ann Arbor
Joseph Batdorf, M.D.	Goodrich
Xenophon Skufis, M.D.	Adrian
Kenneth Carman, M.D.	Garden City





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Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

THE RECOVERY ROOM. Immediate Postoperative Management. Max S. Sadove, M.D., Professor of Surgery (Anesth.) and Head, Division of Anesthesiology, University of Illinois College of Medicine and the Research and Educational Hospitals; and James H. Cross, M.D., Clinical Assistant Professor in Surgery, University of Illinois College of Medicine. With contributions by 24 authorities. Illustrated. Philadelphia and London: W. B. Saunders Company, 1956. Price $12.00.

The title of this new book is a bit misleading, for it contains the most complete detail on postoperative care and postoperative orders that the reviewer has ever encountered in one volume. The twenty-six men who have contributed chapters dealing with their various specialties have also discussed immediate preoperative orders, as well as measures designed to prepare the patient for surgery. Thus, there is a wealth of material to be used by all physicians and surgeons who attend hospital patients.

The first two chapters cover the organization and management of a recovery room and its expanded unit, the intensive therapy unit where serious patients of all types may be treated for several days. There are detailed chapters on shock, burns, electrolyte therapy, pediatric surgery, and a wide variety of general and gynecologic surgical procedures, including a fine chapter on the newer field of vascular surgery. There is an excellent chapter on urgent medical problems, cardiac emergencies, cerebrovascular accidents, massive gastrointestinal hemorrhage and considerable detail on the immediate management of diabetic acidosis and coma.

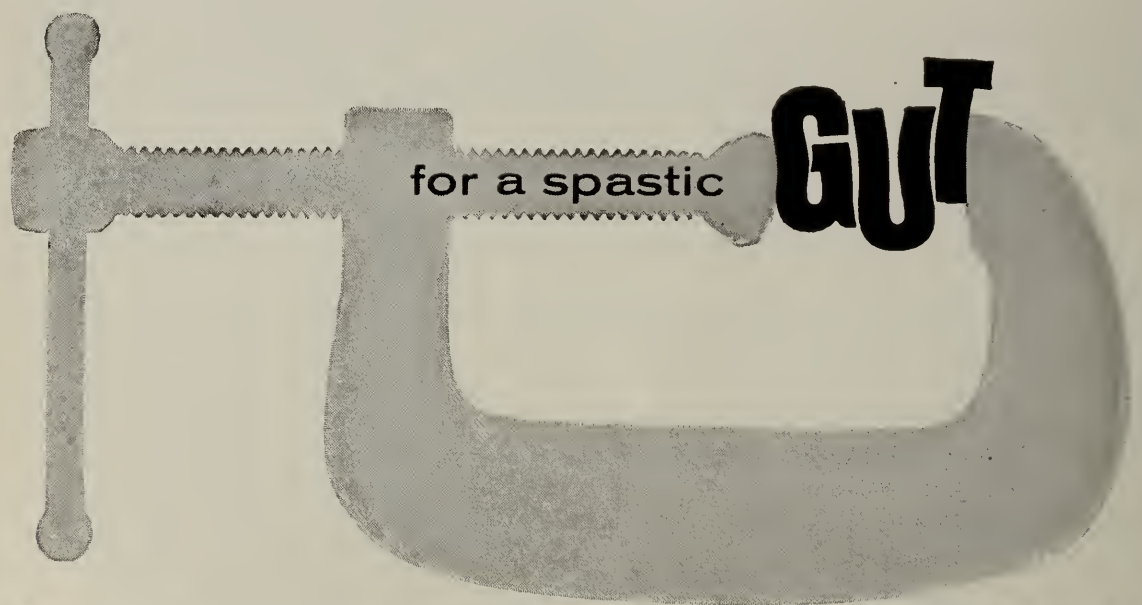
The final chapter on nursing care in the recovery room is most complete, with routines, medications, charting and the list of necessary equipment and supplies for the unit being given in great detail. This valuable information should be available in all nursing stations, as well as in the recovery room. General practitioners, specialists, interns and residents in training, nurses and nurses aides will all find this a very practical and important reference.

S. B. W.

EPILEPSY AND THE LAW. A Proposal for Legal Reform in the Light of Medical Progress. Roscoe L. Barrow, Dean, University of Cincinnati College of Law; Legal Advisor, Special Committee on Legislation, American League Against Epilepsy; and Howard D. Fabing, M.D., Past-President, American Academy of Neurology, Chairman, Legislation Committee, American League Against Epilepsy. New York: Hoeber-Harper, 1956. Price $5.50.

Our laws need changing as medical science progresses. This book gives an insight into the laws passed by many states early in this century in an attempt to prevent

(Continued on Page 1400)



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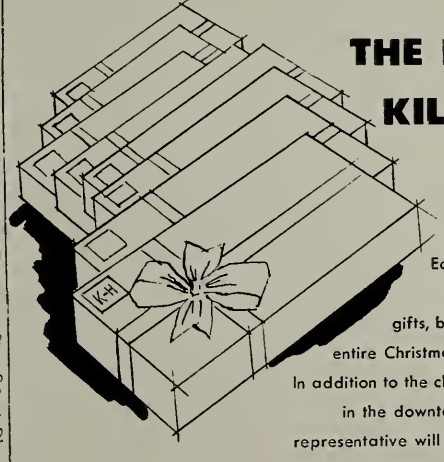
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(Continued from Page 1398)

breeding of certain mental and health conditions considered to be hereditary. The eugenics have been compelling. Our state, along with many others, now has some inexcusable laws regarding epilepsy and mental disease. Wisconsin has just recently repealed its law which prohibited epileptics from marrying.

This book well presents the problem and should have wide reading among our doctors meeting hereditary and mental problems.

ANATOMY FOR SURGEONS. Volume 2. The Thorax, Abdomen, and Pelvis. By W. Henry Hallinshead, Ph.D., Professor of Anatomy, Mayo Foundation, University of Minnesota, Head of the Section of Anatomy, Mayo Cllinic, Rochester, Minnesota. With 1109 Illustrations. New York: A Hoeber-Harper Book, 1956.

In the 911 pages of this second volume of "Anatomy for Surgeons," the author has succeeded in his announced intention of presenting a readable anatomy, and in addition to his twenty-five years of experience as a teacher of anatomy has utilized the experince of twenty-two surgeons of the Mayo Foundation and Mayo Clinic who read and criticized every chapter. Each of the sixteen chapters ends with a very adequate list of references drawn from the anatomic and surgical literature.

The purely diagrammatic illustrations, 1109 in all, are excellent, and many of them are original. There is extensive illustration and discussion of the arterial system of each organ and each region, with the important variations encountered, and this is one of the main contributions of this text.

Specific surgical procedures are discussed in various chapters in relation to variations of arterial and nervous anatomy which would influence operative technique. Thus the anatomy of the thorax, heart and great vessels, vagus nerves, pancreas, colon and rectum (sphincter saving operations) is explained as it relates to newer operative techniques, with references to current surgical literature.

The author has included just enough embryology to explain the anomalies and anatomical variations which the surgeon should know. Anomalies of the kidney receive more attention than any other single organ in this book. The pelvis, often a confusing area to the student or surgeon, is very nicely divided into four chapters—General Features of the Pelvis; Pelvic Portion of the Urinary System, Genital System in the Pelvis, and The Rectum and Anal Canal—which division simplifies its understanding.

PROCTOLOGY. By Harry E. Bacon, B.S., M.D., Sc.D., LL.D., F.R.S.M. (Lond.), F.A.C.S., F.I.C.S. (Hon.) F.P.C.S. (Hon.), F.J.C.S. (Hon.), F.B.C.S. (Hon.); Professor and Head, Department of Proctology, Temple University Medical School; Diplomate, American Board of Surgery; President-elect, American Board of Proctology; Stuart T. Ross, A.B., M.D., F.A.C.S., F.A.P.S., F.I.C.S., Attending Proctologist, Nassau Hospital, Mineola, and Mercy Hospital, Rockville Centre; President, American Proctologic Society; Diplomate and Secretary, American Board of Proctology;

(Continued on Page 1403)

IF YOUR PATIENT WANTS TO DRINK THAT'S HIS BUSINESS
IF HE WANTS TO QUIT that's our BUSINESS

BRIGHTON HOSPITAL, now in operation for more than three years, wishes to thank the physicians of Michigan and Ontario for the good reception and the confidence given to us.

We know that today's physician recognizes the many-sided nature of the disease—Alcoholism. Beyond the physical, which requires expert treatment in itself, the alcoholic's physician is plagued, we know, with the equally vital aspects, which make demands on his time and attention, of the emotional, spiritual and mental sickness he notes in his patient.

We believe that Brighton Hospital offers the answer. Physicians can now send their alcoholic patients to Brighton with the certain assurance that they will find expert medical and nursing attention AND that, if they so desire, patients will be thoroughly indoctrinated with the program of Alcoholics Anonymous.

BRIGHTON HOSPITAL is NOT interested in the patient who merely wishes to be dried out in order to resume drinking. We ARE interested in those patients who really, fervently, seek complete rehabilitation and a way of life FREED from alcohol.

BRIGHTON HOSPITAL is owned and operated by MICHIGAN ALCOHOLIC REHABILITATION FOUNDATION, a non-profit organization devoted to the best possible hospitalization of the alcoholic who seeks to stop drinking.

DOCTORS, we are here to serve you. We are here to serve your patients.

BRIGHTON HOSPITAL

12851 East Grand River Avenue **Brighton, Michigan** **Phone: Brighton Academy 7-1211**

(Continued from Page 1400)

and Porfirio Mayo Recio, B.S., M.D., M.Sc., F.P.C.S., F.I.C.S., Assistant Professor Surgery, College of Medicine, University of Philippines; Attending Proctologic Surgeon, Philippine General Hospital; Diplomate, American Board of Proctology; Regent, Philippine College of Surgeons. With 228 illustrations and five Plates in full color. Philadelphia and Montreal: J. B. Lippincott Company. Price, $10.00.

This book is a comprehensive study of the field of proctology, well and logically written and lends itself to easy reading and us. It should adequately meet the needs of the general practitioner, general surgeon and intern or resident who desires a good reference to the fundamentals of basic proctology.

The illustrations, photograph and charts on differential diagnosis of proctologic conditions are well done and should be useful to both the student and more experienced. Certain new surgical techniques are presented in adequate detail for one's evaluation.

It is the feeling of the reviewer that this is a worthwhile book on the subject of proctology.

D.J.P.

There is little evidence in man for an environmental factor in the etiology of large intestinal cancer.

* * *

When there is clinical evidence of an enlarged and indurated thyroid gland that is not obviously inflammatory, the lesion should be treated as though it were malignant.

* * *

Esophageal cancer is rarely diagnosed early.

The patient with esophageal cancer is normally dead within five years regardless of treatment.

PR REPORT

(Continued from Page 1300)

nual Session: a speaker, G. D. Cummings, M.D., Director of the State Health Department Laboratory, was invited to address the guests on a scientific topic and four MSMS officials were impanelled to answer any question on any subject of current health interest to the attendant press. These included W. S. Jones, M.D., Arch Walls, M.D., D. Bruce Wiley, M.D. and L. Fernald Foster, M.D. Serving as moderator was Hugh W. Brenneman, MSMS Public Relations Counsel.

Television, radio and press coverage of the Session itself was extensive. A detailed account of all the stations and publications reporting the events of the week-long schedule will be found in the full report of the Annual Session in next month's Journal. Suffice it to say that through the fullest use of tape recordings, motion pictures, mobile units, the wire services, and because of the devoted work of the Annual Session Press Committee, the co-operation of the guest speakers and the excellent coverage given by skilled science writers, publicity on this session far surpassed that of any previous meeting of MSMS.

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SURGERY—Surgical Technic, two weeks, November 26, December 10
Surgery of Colon and Rectum, one week, November 26, March 4
General Surgery, one week, February 11
General Surgery, two weeks, April 23
Surgical Anatomy and Clinical Surgery, two weeks, March 4
Basic Principles in General Surgery, two weeks, January 14
Fractures and Traumatic Surgery, two weeks, November 26

GYNECOLOGY AND OBSTETRICS
Office and Operative Gynecology, two weeks, February 11
Vaginal Approach to Pelvic Surgery, one week, February 4
General and Surgical Obstetrics, two weeks, February 25

MEDICINE—Electrocardiography and Heart Disease, two-week basic course, March 11
Gastroenterology, two weeks, May 13
Dermatology, two weeks, May 6
Gastroscopy, two weeks, March 18

RADIOLOGY—Diagnostic X-ray, two weeks, November 26
Clinical Uses of Radioisotopes, two weeks, May 6

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In the manuscript which we will submit the indications for the various pheochromocytoma tests will be summarized together with our experience with samples sent to us over the past year. In the meantime we wish to inform physicians of the state that this test is available under proper circumstances of urine collection and at a cost of $15.00 per analysis.

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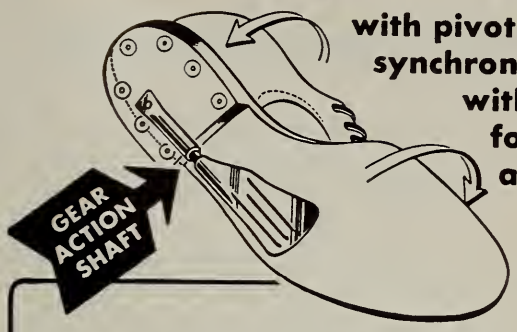
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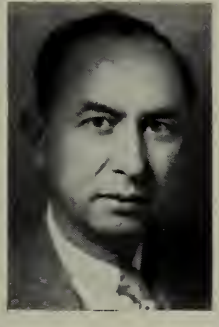
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THE JOURNAL
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Published monthly by the Michigan State Medical Society as its official journal at 2642 University Avenue, Saint Paul 14, Minnesota.

Entered at the post office at Saint Paul, Minnesota, as second class matter, May 7, 1930, under the Act of March 3, 1879.

Acceptance for mailing at special rate of postage provided for in Section 1103 Act of October 3, 1917, authorized August 7, 1918.

Yearly subscription rate, $6.00; single copies, 60 cents. Additional postage; Canada, $1.00 per year; Pan-American Union, $2.50 per year; Foreign, $2.50 per year.

PRINTED IN U.S.A.

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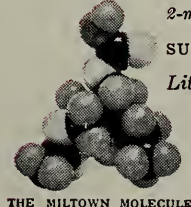
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HIGHLIGHTS OF EXECUTIVE COMMITTEE OF THE COUNCIL

Meeting of October 17, 1956

- **The monthly financial report** and bills payable were presented and approved.
- **Officers Night Banquet:** Report on banquet held September 26, 1956 (during MSMS Annual Session), resulted in a motion that the Officers Night Banquet be repeated but that the Biddle Lecture be scheduled as a day presentation on Wednesdays at future MSMS Annual Sessions, with details for the 1957 Banquet to be developed by the Executive Directors and Public Relations Council for presentation to The Council.
- **The Committee to meet with UAW-CIO:** The President was authorized to appoint a committee of MSMS representatives to meet with the President and other officers of the UAW-CIO to discuss medical problems.
- **Report on October 19 meeting re medical licensure** resulted in motion that "The Council approves the present medical licensure legislation in Michigan."
- **W. S. Jones, M.D.,** of Menominee, a member of the Governor's Study Commission on Public Health, relayed the Commission's request that MSMS present its views concerning public health matters at the October 26 meeting of the Commission in Lansing. The invitation was accepted.
- **Appointments:** R. W. Teed, M.D., Ann Arbor, and A. B. Gwinn, M.D., Hastings, were appointed Chairman and Vice-Chairman respectively of the Public Relations Committee; the Committee on Study of Fee Schedules for Michigan Medical Service was reappointed in toto, with L. W. Hull, M.D., Detroit, as Chairman; Committee on Study of Prevention of Highway Accidents was appointed as follows: J. R. Rodger, M.D., Bellaire, Chairman, G. H. Agate, M.D., Lansing; H. E. DePree, M.D., Kalamazoo; J. M. Dorsey, M.D., Highland Park; H. F. Falls, M.D., Ann Arbor; A. Z. Howard, M.D., Detroit; H. T. Johnson, M.D., Lansing; R F. Powers, M.D., Saginaw; C. L. Straith, M.D., Detroit, and H. J. Meier, M.D., Coldwater, Advisor. James W. Hubly, M.D., Battle Creek, and Wm. A. Irwin, M.D., of Detroit, were appointed as MSMS representatives to the Michigan Cancer Co-ordinating Committee. E. G. Merritt, M.D., Detroit, and J. D. Miller, M.D., Grand Rapids, were appointed as MSMS representatives to meet with representatives of the State Pharmaceutical Board on dispensing of drugs.
- **County Secretaries—Public Relations Seminar:** The theme and program of the January, 1957, County Secretaries-Public Relations Seminar was presented and approved.
- **Resolutions** as adopted by the Section on Public Health and Preventive Medicine on September 26, (at Annual Session) were presented:
 (a) Endorsing fluoridation of public water supply, which was endorsed by the Executive Committee;
 (b) Recommending that a full-time Chair of Preventive Medicine and Public Health be established at each of the two medical schools located in Michigan, which was endorsed by the Executive Committee pro-

(Continued on Page 1418)

MEDICAL MEETINGS AND CLINIC DAYS

A list of known medical meetings and clinic days, sponsored by county medical societies and other physician groups in Michigan, follows:

1957

January 16-18	Michigan Rural Health Conference	East Lansing
January 23-25	Annual Meeting of the MSMS Council, Sheraton-Cadillac Hotel	Detroit
January 25-27	MSMS County Secretaries-Public Relations Seminar, Sheraton-Cadillac Hotel	Detroit
March 13-15	Michigan Clinical Institute, Sheraton-Cadillac Hotel	Detroit
Spring	MSMS Postgraduate Extramural Courses	Statewide
April 17	Genesee County Medical Society, Twelfth Annual Cancer Day	Flint
May 5-10	Sixth International Congress of Otolaryngology	Washington, D. C.

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(Continued from Page 1414)

vided such chairs are filled only by doctors of medicine;

(c) Requesting substantial representation from the Public Health and Preventive Medicine Section on the MSMS Committee on Preventive Medicine, which resolution was disapproved because the MSMS By-laws specifically designate the composition of this particular committee (chairmen of the scientific committees of the Society).

- **Section Attendance at September, 1956, Annual Session:** General Practice 185, Pathology 110; Gastroenterology-Proctology 105, Nervous and Mental 100, Urology, 96, Anesthesiology, 75, Public Health and Preventive Medicine 61; Obstetrics & Gynecology 54; Ophthalmology 50; Occupational Health 40; Dermatology & Syphilology 31; Pediatrics 25; Medicine 20; Otolaryngology 19; Radiology 14.
- **1957 Testimonial Luncheon for Michigan M.D.'s** who are Presidents of national medical and health societies—the report and plans of Chairman G. B. Saltonstall, M.D., of Charlevoix, was approved.
- **Gold Medal Award:** The Council approved the creation of a Gold Medal Award for scientific achievement in this state, to be presented at the testimonial luncheon on March 14, 1957, during the Michigan Clinical Institute.
- **Ralph W. Shook, M.D.,** was authorized to attend organizational meeting of the American Association of Medical Assistants in Milwaukee.
- **C. Robert Dean, M.D.,** Detroit, was nominated for the President Physician's Award, for outstanding contributions to the handicapped and their employment.
- **K. W. Toothaker, M.D.,** Lansing, and E. M. Vardon, M.D., Detroit, were nominated to the Governor as MSMS representatives to the Michigan Board of Nursing Advisory Council.
- **Council Committees for the year 1956-57,** including the four standing committees, were presented by Chairman Wiley and approved.
- **Progress report** on the Kopprasch case was presented by Legal Counsel Lester P. Dodd, Detroit.
- **Medicare Program:** Jay C. Ketchum, Executive Vice President of Michigan Medical Service, reported on the swift progress of this program implementing the federal law to supply medical care to servicemen's dependents; complete informational material on the medicare program will be sent to all MSMS members, as soon as the program has been firmed. D. Bruce Wiley, M.D., Utica, and W. B. Harm, M.D., Detroit, were authorized to attend the Medicare Conference, Washington, D. C., October 24, to negotiate the contract on behalf of MSMS.
- **The monthly report of Rheumatic Fever Coordinator** Leon DeVel, M.D., was presented and received.
- **The Public Relations Counsel** presented the following matters: (a) Conference of Health Professionals, a meeting preceding Michigan Rural Health Conference, January, 1957; (b) Farm-City Week; (c) Preparing material for Michigan Employment Security Commission on training and work of a doctor of medicine; and (d) that President Walls, Detroit, Secretary L. Fernald Foster, Bay City, and Herbert Estes of Ann Arbor (President of Michigan Health Council) will speak at the Detroit Economic Club in Detroit on March 4.
- **Committee Reports:** The following were reviewed: (a) Advisory Committee of Past Presidents, meeting of September 27; (b) Joint Meeting of National Defense and Rural Medical Service Committees, October 10; and (c) Progress Report from Maternal Health Committee Chairman Francis Jones, M.D., Lansing.

EFFECTIVE LIAISON BY A COUNTY MEDICAL SOCIETY

C. D. Selby, M.D., Port Huron, Secretary of St. Clair County Medical Society, reports that the St. Clair County Medical Society has made special efforts this year to improve relationships with the public, the voluntary health and welfare agencies and those professional groups whose interests are concerned with the practice of medicine.

In the spring, the society met with the pharmacists of St. Clair County, and so many common objectives came out of that meeting that a joint committee was created to represent the two groups. This committee was charged with the development of common policies for guidance of physicians and pharmacists in affairs related to public health and preventive medicine.

On October 10, 1956, members of the Lambton County Medical Society of Ontario, Canada, which includes the city of Sarnia, met with the St. Clair County Medical Society at the Black River Country Club in Port Huron. The program, arranged by the local doctors, was as follows:

1. "Management of Strabismus"
 GLENN E. MOHNEY, M.D.
2. "Use of Intra-Medullary Nails in Fractures of the Femur"
 CHARLES O. TOWNLEY, M.D.
3. "Hypertension in Relation to Unilateral Kidney Disease"
 R. S. BAILEY, M.D.

On November 13, local members of the Bar Association met with the St. Clair County Medical Society and discussed matters of concern to these

(Continued on Page 1422)

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EFFECTIVE LIAISON BY A COUNTY MEDICAL SOCIETY

(Continued from Page 1418)

two groups. Some matters in the field of forensic medicine were clarified.

The St. Clair County Medical Society now has special medical advisory committees to work with the Community Chest, National Foundation for Infantile Paralysis, Boy Scouts, Girl Scouts, Red Cross, Chamber of Commerce, and Port Huron Junior College.

AMERICAN CONGRESS OF PHYSICAL MEDICINE AND REHABILITATION

The thirty-fifth annual scientific and clinical session of the American Congress of Physical Medicine and Rehabilitation will be held September 8-13, 1957, inclusive, at Hotel Statler, Los Angeles. All sessions will be open to members of the medical profession in good standing with the American Medical Association.

In addition to the scientific sessions, annual instruction seminars will be held. These lectures will be open to physicians as well as to therapists who are registered with the American Registry of Physical Therapists or the American Occupational Therapy Association.

To stimulate interest in the field of physical medicine and rehabilitation, the American Congress of Physical Medicine and Rehabilitation will award annually a prize for an essay on any subject relating to physical medicine and rehabilitation. The contest, while open to anyone, is primarily directed to medical students, interns, residents, graduate students in the pre-clinical sciences and graduate students in physical medicine and rehabilitation.

Full information may be obtained by writing to the Executive Secretary, Dorothea C. Augustin, American Congress of Physical Medicine and Rehabilitation, 30 North Michigan Avenue, Chicago 2, Illinois.

ANTIDIABETIC DRUGS

Eli Lilly and Company has announced the suspension of the fifteen-month clinical trial of carbutamide, or BZ-55. Carbutamide is a sulfonamide derivative which controls many cases of diabetes when given by mouth.

In a statement, Dr. Kenneth G. Kohlstaedt, director of the clinical research division, said:

"We have communicated this decision to some 2,900 physicians who have been testing carbutamide in more than 10,000 patients. We are grateful to these physicians and to scientists who have participated in what we believe is the most intensive study of a new compound undertaken to date by a pharmaceutical house.

"Our search for a safe oral antidiabetes compound which will relieve certain, selected diabetics of the necessity for daily Insulin injections is continuing undiminished. In fact we already have other compounds under study which we hope will offer more promise in offsetting the pancreatic defect that underlies diabetes without involving risks unacceptable in wide-scale treatment.

"Discontinuing use of the drug involves no danger to the 10,000 patients who have been controlling their diabetes with it. They may safely return to their former method of control.

"We are not unmindful of the fact that 40,000 patients in Germany have taken carbutamide without any serious side effects being reported by German investigators. Nor are we unmindful of the fact that in our own studies 95 per cent of those patients who are able to control their diabetes with carbutamide appear to be able to do so for months without untoward effects. However, among the other 5 per cent there have been a few serious side reactions to the drug which are identical to those experienced with other sulfa drugs.

"In view of these findings, and in full consideration that carbutamide is a drug of convenience rather than necessity, Eli Lilly and Company believes it is prudent to suspend the clinical trial pending further investigation. It appears to us that the risks of possible injury and perhaps long-term effects not yet established are greater than any short-term benefits which may seem to be derived from the drug.

"We deeply regret that this compound apparently does not meet the rigid requirements for a drug that must be taken throughout life. At the same time, we are grateful that the study of carbutamide was broad enough and thorough enough to uncover its limitations.

"In the early study of carbutamide in about 700 patients, diabetes experts reported to us that there were almost no serious side reactions to the drug. As carbutamide continued to 'look good,' we expanded all phases of the investigation. The clinical trial was increased to include more than 10,000 patients. It was only after the larger test was put into effect that adverse reports began to be heard from the field.

"We share the disappointment of many diabetics. They had hoped that carbutamide would be the long-sought answer to the need for an oral therapy. We had hoped that through the introduction of carbutamide in the United States we could add to our long list of contributions to diabetes therapy which began with the first commercial Insulin preparation in January, 1923."

VOLUNTARY HEALTH INSURANCE IN MICHIGAN

The number of people in Michigan who are covered by voluntary health insurance reached a new high by September 30, 1956, the Health Insurance Council has reported. The Council estimates that 6,200,000 persons were protected by some form of insurance designed to help pay hospital and doctor bills.

This figure, the Council said, is part of the continued growth of health insurance throughout the country, which was revealed last August in its tenth annual survey of the extent of voluntary health insurance coverage for 1955. The number of people covered by some form of health insurance in the nation today stands at the 110 million mark.

In releasing the findings of its survey, which is based on reports of insurance programs of

(Continued on Page 1426)

an effective adjunct to therapy

of common dermatoses



prolonged antibacterial action — emollient effect

no irritation — french-milled — noncrumbling

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Cancer Comment

THE MICHIGAN CANCER CO-ORDINATING COMMITTEE

Cancer: annually responsible for the death of well over 200,000 Americans and the cause of untold pain and suffering in those who survive, is one of the major health problems of our time. Interest in an organized effort for the control of cancer, in which the Michigan State Medical Society played an active part, began in 1930 with the development of a "Cancer Week" program by the American Society for the Control of Cancer and the formation of a permanent committee on cancer control by the medical society.

The initial efforts of these groups were directed toward additional education of the medical profession concerning the importance of cancer and newspaper publicity to awaken the interest of the public. The following ten years saw much quickening of efforts of physicians and the volunteer workers of the American Society for the Control of Cancer with gradually developing liaison between these two groups. This liaison has been of utmost importance in fostering and further increasing the effectiveness of the fight against cancer.

Governmental health agencies, as well as other professional organizations, developed increasing interest in this problem and were invited to send representatives to the Cancer Control Committee. By 1945, the committee membership of twenty-six included representatives from the two Michigan Divisions of the American Cancer Society, the Michigan Department of Health and the Michigan State Dental Association.

Time does not permit the enumeration of the many projects conceived, implemented and completed by the co-operative activities of these groups, nor to tell of the impact of these efforts on the medical profession and the public at large.

Availability of increasing funds for cancer through the yearly campaigns of the American Cancer Society and annual contributions of the Federal Government to the state health departments made closer liaison and co-operation among all groups interested in this problem more vital if the most effective program for cancer control was to be developed and activated.

Consequently, in 1953, the President and the Council of the Michigan State Medical Society formally invited the two Michigan Divisions of the American Cancer Society, the Michigan Department of Health, the Michigan Health Officers Association and the Michigan State Dental Association to form a voluntary co-operative committee to better co-ordinate the activities of all groups interested in the eradication of cancer as a major health problem. This Michigan Cancer Co-ordinating Committee composed of fifteen lay and professional members was formally organized, reviewed the activities of the several organizations represented, and developed aims and objectives of its own.

Following this review and a further analysis of the several problems involved, the committee suggested the responsibilities of each of the six organizations in the attack on each problem. The most important problems considered were public education, improvement in the earlier diagnosis and treatment of cancer, statistics, professional education, research, organization and campaign. In developing an all-out program, it was further decided that there should be a regular (annual) review of the activities of the several organizations with criticisms and suggestions for continuation, change in emphasis or possible discontinuance of certain projects. All recommendations of the Michigan Cancer Co-ordinating Committee are subject to approval of the member organizations involved. It is hoped, however, that this committee will ultimately act in more than a purely advisory capacity and that additional agencies interested in cancer might be added to the representation.

Again, time does not permit recounting all of the activities of this group, but it is pertinent to mention some of the more important projects which have been carried over from the Cancer Control Committee and those developed by the Michigan Cancer Co-ordinating Committee in its three years of operation. For sake of time and space, these will be merely listed.

1. Revision, publication and distribution of the brochure, "The Story of Cancer for High Schools," which now approaches 14,000 distributed copies.
2. Sponsorship of an annual "Cancer Number" of THE JOURNAL of the Michigan State Medical Society, as well as development of a bimonthly "Cancer Comment" page in the same publication.
3. Creation and sponsorship of the annual "Michigan Cancer Co-ordinating Committee Lecture" at the Michigan Clinical Institute in Detroit on some phase of cancer for physicians.
4. Cosponsorship of an annual Cancer Conference for physicians and volunteer workers held in conjunction with the Leadership Training Conference of the Michigan Divisions of the American Cancer Society.
5. Development of liaison with many organizations including the Michigan Department of Public Instruction, the Michigan Education Association, the Michigan

(Continued on Page 1426)

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to minimize gastric distress

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2.5 mg. or 5 mg. prednisone or prednisolone with 50 mg. magnesium trisilicate and 300 mg. aluminum hydroxide gel.

Clinical evidence[1,2,3] indicates that to augment the therapeutic advantages of prednisone and prednisolone, antacids should be *routinely* co-administered to minimize gastric distress.

References: 1. Boland, E. W., *J.A.M.A.* 160:613, (February 25,) 1956. 2. Margolis, H. M. *et al*, *J.A.M.A.* 158:454, (June 11,) 1955. 3. Bollet, A. J. *et al*, *J.A.M.A.* 158:459, (June 11,) 1955.

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THE MICHIGAN CANCER CO-ORDINATING COMMITTEE

(Continued from Page 1424)

Rural Health Conference and various nurses organizations, to the end that these groups will have speakers on their annual programs stressing the importance of cancer and methods by which teachers, high school and college students, nurses and others may be kept informed about new developments in this field. The committee is glad to furnish speakers on cancer subjects to any statewide organization.

6. Urging each county medical society in Michigan to devote at least one meeting annually to some phase of cancer and supplying speakers on these subjects when requested. So far thirty-eight speakers have been used.
7. Sponsorship of exhibits on cancer (including quackery) at various medical meetings, as well as the Michigan State Fair and other public events or conventions.
8. Encouragement of the greater use of the periodic health examination of well persons in the office of the family physician, to the end that many more cases of cancer will be discovered early enough so that more successful treatment can be carried out.
9. Development of minimum standards of cancer control activities for the member organizations, as well as other groups.
10. Acting as a clearing house, in co-operation with the member organizations, for their publications, kinescopes, movies and information about quackery.
11. Publication of an annual report on cancer control activities in Michigan.
12. Encouragement of county medical societies and hospital medical staffs to develop "Cancer Registries."

Finally, the job is only begun. The outlook for the future is excellent if we continue in the direction in which we started. The projects mentioned above, as well as others already begun, will require much more time, co-operative effort and liaison.

In a sense, this is a preliminary statement of our activities and our aims. It is the sincere hope of the members of this committee that our efforts will be an additional stimulus to closer co-operation and liaison, not only among the organizations represented at this time, but also to other organizations who may join us in the future, and in fact to all organizations and individuals interested in the earliest possible solution to the many facets of the perplexing problem of Cancer Control.

C. Allen Payne, M.D., *Chairman*
Michigan Cancer Co-ordinating Committee

YOU AND YOUR BUSINESS

VOLUNTARY HEALTH INSURANCE IN MICHIGAN

(Continued from Page 1422)

insurance companies, Blue Cross-Blue Shield and other health care plans, the Council went on to say that there were 5,869,000 persons covered by hospital expense insurance in Michigan as of December 31, 1955. This represents a gain of 495,000 over the 1954 total of 5,374,000 persons.

Surgical expense insurance, which helps to defray the cost of physicians' charges for operations rose to 5,610,000, as compared with 5,201,000 the year before, a gain of 409,000 persons.

The number of people protected by regular medical expense insurance, providing doctor visits for non-surgical care, during 1955 rose to 4,066,000 as against the previous year's figure of 2,915,000, reflecting an increase of 1,151,000 persons covered.

The Health Insurance Council, which is a federation of eight insurance associations representing 90 per cent of the accident and health insurance business, stated that this growth reflects the desire of the people of Michigan to help protect themselves against the cost of accident and illness.—(*Health Insurance Institute*)

TAX RULINGS WILL BENEFIT HOSPITAL AND DEFENSE AIDES

Two rulings pubished recently by Internal Revenue Service may have some effect in encouraging voluntary services as hospital aides and civil defense workers. In one lengthy opinion, IRS holds that persons giving their services gratuitously to hospitals and churches may consider expenses of transportation and uniforms (cost and maintenance) as deductible charitable contributions. However, costs of meals are not included in this liberalization.

In the other ruling, travel and other expenses incidental to participation in civil defense activities are similarly held to constitute "contributions or gifts within the meaning of section 170 of the Internal Revenue Code of 1954 and are deductible in the manner and to the extent provided in such section."

Department of HEW's expanding program in health and welfare of the aging has recruited John B. Holden from Michigan State University as a specialist in adult education and aging in the Office of Education.

U. S. AID ASKED BY MAKERS OF SURGICAL INSTRUMENTS

American manufacturers of surgical instruments are in trouble. Logistics experts of Defense Department and Army, Navy and Air Force met with some of them recently at a special conference to discuss their difficulties, as outlined by their industry group, Manufacturers Surgical Trade Association. Main problem: Meeting competition of foreign manufacturers, notably the Germans, whose advantage of much lower labor costs enables them to market quality instruments at prices considerably below the American tags.

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PR REPORT

"THE MOVING FINGER WRITES; AND, HAVING WRIT . . . "

On November 6, in every voting precinct in the state, the "moving finger writ" and in so doing noted the election to the state legislature and Congress many of the incumbent office holders but added thirty-one newcomers.

The partisan make-up of the national and state legislative delegations changed little. Republicans and Democrats maintained the status quo in the State Senate, although six new members will replace retired or defeated members.

In Michigan's Congressional delegation, the Republicans gained one seat when Charles E. Chamberlain, the oldest (age thirty-nine) of the four freshmen-elect Congressmen out-campaigned Democrat Donald Hayworth, incumbent, in the Sixth District (comprising Ingham, Genesee, Livingston Counties). The only other change saw Republicans R. J. McIntosh, R. P. Griffin, and W. S. Broomfield, supplant former Republican members as the Democrats returned their other incumbents to Washington, D. C.

In the big (110 seat) Representative Hall in the Capitol at Lansing, twenty-one first-termers will take their oaths to uphold the constitution when the Legislature convenes on January 9. In these ranks, the Republicans picked up two seats formerly held by Democrats (Macomb, 3rd and Monroe) and elected a Republican from Plymouth to replace a Republican-turned-Independent.

Significant is the fact that although most of the professions are represented in these legislative bodies, there are no M.D.'s. Congratulations are in order to Russell H. Strange, M.D., Mt. Pleasant, whose son Russell H. Strange, Jr., of Clare, was elected a State Representative, the youngest member ever elected to the Michigan Legislature.

MICHIGAN RURAL HEALTH CONFERENCE TO FEATURE "PROFESSIONAL DAY"

A new feature of the Tenth Annual Michigan Rural Health Conference will be a Professional Day. The three-day conference will be held January 16, 17 and 18, 1957, at the Kellogg Center on the campus of Michigan State University.

(Continued on Page 1438)

Outguessing your "Second Guessers" ...always a serious problem in OBESITY!



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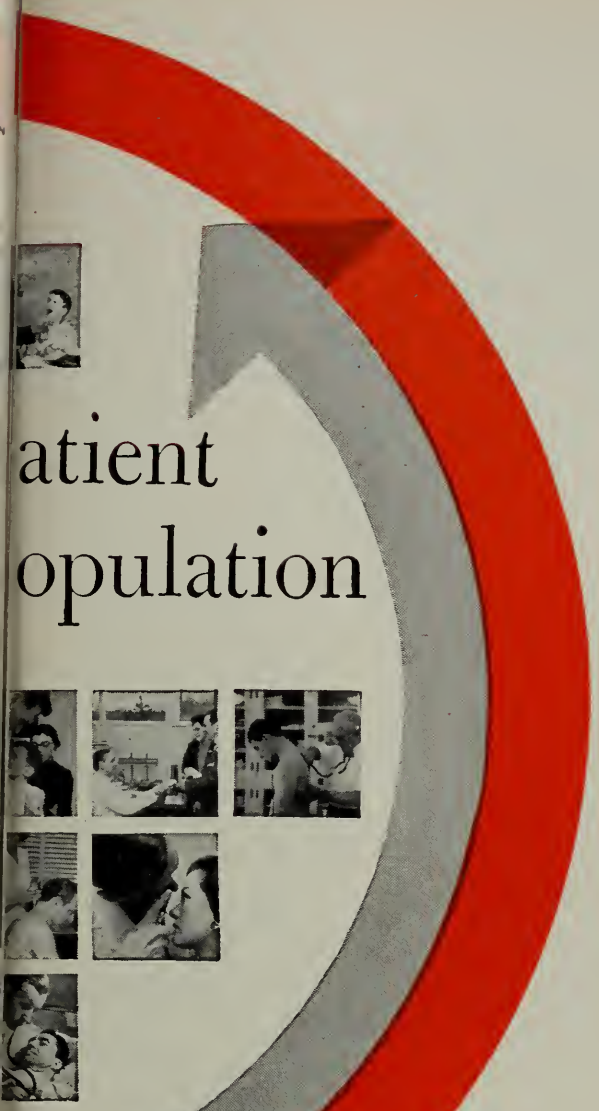
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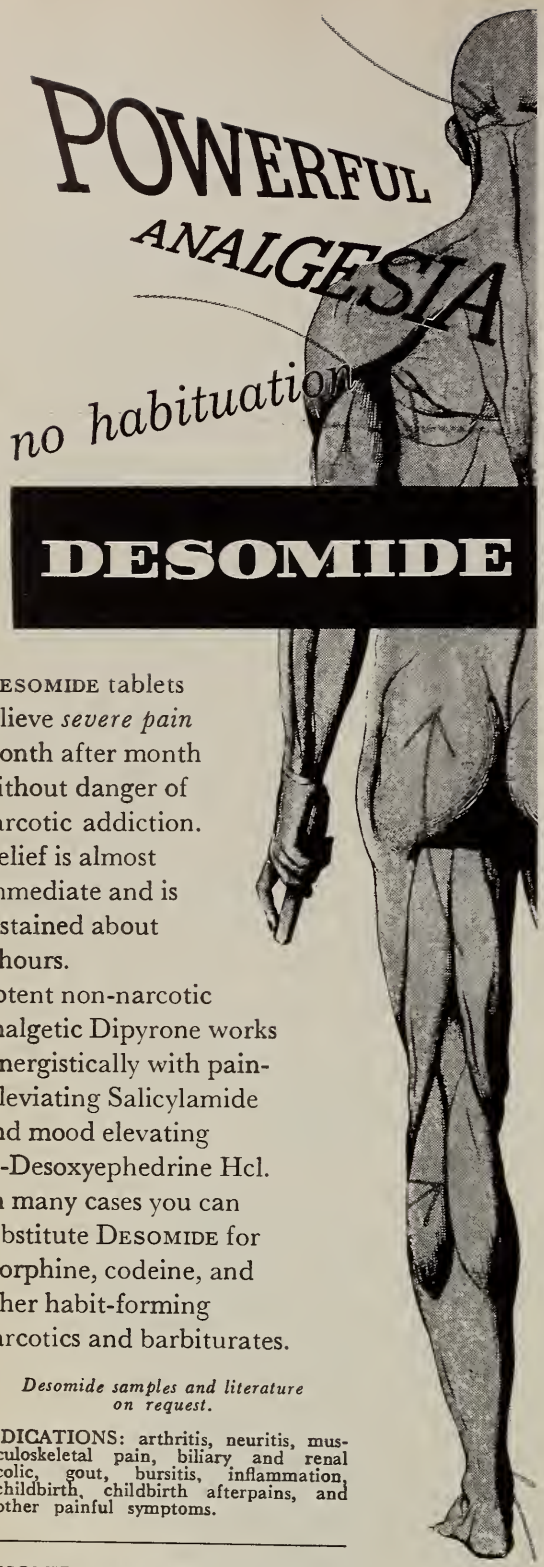
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INDICATIONS: arthritis, neuritis, musculoskeletal pain, biliary and renal colic, gout, bursitis, inflammation, childbirth, childbirth afterpains, and other painful symptoms.

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MICHIGAN RURAL HEALTH CONFERENCE

(Continued from Page 1434)

The Planning Committee of the Rural Health Conference has set aside the first day of the meeting to be devoted entirely to scientific presentations by Doctors of Medicine and other professionals in the health field.

The speakers will develop their scientific papers around the theme of "fringe area" health problems—or those health problems which occur through the rapid expansion of the suburban areas as more and more people move out of the cities.

The problems include such subjects as sanitation, school health, water supply, and the fact that there are not enough doctors to serve the expanded community. Migratory labor in some areas is still another problem of "fringe areas."

The Council of MSMS has approved the expenses for one delegate from each County Medical Society.

PUBLIC RELATIONS—HERE TO STAY?

Organized public relations, fairly new to the medical scene, got a vote of confidence from physicians recently. A nationwide survey of doctors, commissioned by AMA, reveals that nine out of ten M.D.'s believe public relations should be an important or very important function of organized medicine.

PR programs, according to the doctors interviewed, make for better understanding, establish societies as the voice of the medical profession, and are an influence in preventing government medicine.

The survey reported that physicians have noted changes on both the national and state levels. They say they are aware of a greater volume of PR activity and a stepped-up pace in these efforts. Some say there is a changed philosophy and that those concerned with public relations seem to be more alert and trying harder to do a good job. They cite TV and radio programs, articles and publications, and a better press as specific indications of improved PR. A better public reaction to the profession is also noted.

The go-ahead signal for continued public relations efforts was also given in survey results. Today's physicians evidently are well aware that public relations is no stop-gap device to secure specific ends—but a long-range public service and educational-type program to build a foundation of understanding and good will.

Esophageal cancer is rarely diagnosed early.

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The patient with esophageal cancer is normally dead within five years, regardless of treatment.



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Karo permits easy adjustment of formula and transition from liquid to solid food as circumstances demand. It may be used with sweet, acid, evaporated, dried or protein milk. Light or dark Karo each supply equivalent nutritive and digestive values... yielding 60 calories per tablespoonful.



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AMA Washington Letter

THE MONTH IN WASHINGTON

Federal health and medical spending for all agencies of government this fiscal year is expected to reach a new high peak. The total is placed at $2,558,719,168, an increase of nearly 13 per cent over the last fiscal year, which itself set a new record.

The spending is spread among twenty-one departments, agencies and commissions concerned in whole or part with health or medicine. They range from an impressive $825,024,300 for the Veterans Administration to a small sum of $12,145 for running the Office of the Attending Physician of Congress.

In between is a broad range of health and medical activities, including money for implementing the many health programs inaugurated by the 84th Congress. The totals are compiled each year by the American Medical Association's Washington Office. The report, the only consolidated Federal medical budget published, is based on actual appropriations by Congress and program data supplied by the federal agencies.

The medical budget total, divided into cost for each man, woman and child in the country, amounts to $15.17 a year, while each family in the United States will be paying $54.61 for this spending, based on Census Bureau figures for population, family size and employment.

Compared with last year's spending, the Defense Department has dropped to second place with its spending estimated at $790,105,000, thus giving way to the VA. The Defense Department shift from the top spending spot, despite a $41 million item for the new dependent's medical care program, is due primarily to more effective joint utilization of facilities, fewer personnel assigned to operation and a planned drop in hospital and dispensary construction.

Department of Health, Education, and Welfare spending for the year ending next July 1, amounts to $772,661.800, which puts that agency's total within striking distance of the two top spenders in the health-medical field. Compared with last year's $526,935,400, HEW spending this year is up a resounding 46 per cent, due in part to more Hill-Burton hospital construction money, record research funds, and permanent and total disability payments.

The accompanying table shows the spending by the twenty-one agencies this year and last.

* * *

NOTES: The long-awaited military dependents' medical care program authorized by the last Congress went into effect December 7. At the height of the program, as many as 800,000 persons not now getting care are expected to be receiving treatment either at military facilities or through private physicians and hospitals. It was launched following a series of negotiations with state medical societies over contracts covering the provision of care outside military hospitals and clinics.

Agency	*Fiscal 1957*	*Fiscal 1956*
Veterans Administration	$ 825,024,300	$ 790,185,800
Department of Defense	790,105,000	818,104,500
Department of Health, Education and Welfare	772,661,800	526,935,400
Federal Civil Defense Admin.	49,810,000	30,450,000
Atomic Energy Commission	31,525,000	27,700,000
International Co-operation Admin.	29,310,000	25,441,000
Department of State	15,496,000	13,669,790
Federal Employes Health Program	10,000,000	6,000,000
National Science Foundation	8,000,000	5,000,000
Department of Labor	7,151,126	7,336,000
Department of Interior	6,138,205	5,770,000
Panama Canal Zone	6,055,300	5,702,900
Department of Treasury	3,511,700	2,990,000
Department of Justice	1,580,000	1,470,000
Federal Trade Commission	1,000,000	1,000,000
Department of Commerce	547,914	277,586
Civil Service Commission	386,000	382,600
National Advisory Committee to Selective Service	180,000	180,000
President's Comm. for Handicapped	134,678	130,000
Health Resources Advisory Comm.	90,000	101,000
Office of Attending Physician of Congress	12,145	———
TOTALS	$2,558,719,168	$2,268,826,576

* * *

Dr. Leroy E. Burney, PHS surgeon general since last August, has announced a number of shifts in major posts within the service. The include Dr. John Cronin, chief of the Hill Burton program, to head the important Bureau of Medical Services; Dr. Jack Masur, from the bureau to directorship of the Clinical Center Bethesda, Md.; Dr. G. Halsey Hunt, associ

(Continued on Page 1448)

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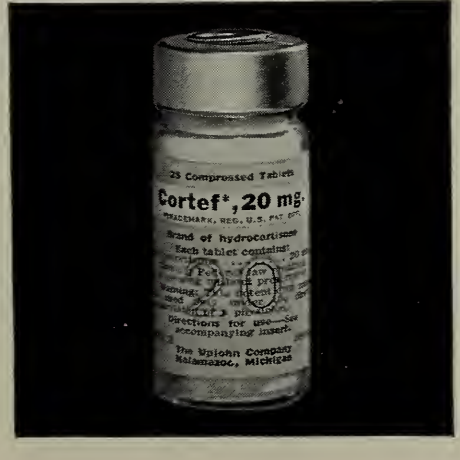
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AMA News Notes

AMA TO HONOR YOUNG SCIENTISTS

The two high school students winning top AMA awards at the National Science Fair next spring will be invited to be guest exhibitors at the AMA's annual meeting June 3-7, 1957, in New York City. Dr. Alphonse McMahon, chairman of the Council on Scientific Assembly, will serve as chairman of the AMA judging committee at the Fair in Los Angeles, May 9-11, 1957. The AMA awards—two "firsts" and two "honorable mentions"—are in addition to those awarded by Fair officials, and are presented by AMA for the best exhibits in the basic medical sciences as an encouragement to scientifically-talented students to enter the study of medicine. This will be the second year of AMA participation.

Approximately 800 persons will attend the National Science Fair, featuring an expected 340 student exhibitors—two finalists from each of the 170 co-operating regional fairs. More than 250,000 high school students now are building exhibits for the 1957 preliminary fairs sponsored by community groups interested in the development of young scientists.

The National Science Fair has increased in size from thirteen supporting regional fairs in 1950 to the 170 fairs expected to send finalists this spring. A conisderable part of this growth is due to stepped-up activity by medical societies in sponsoring or aiding local fairs. The AMA House of Delegates noted this expanding participation and urged even greater support of science fairs by medical societies in a resolution adopted at the 1956 Annual Meeting. Information on organizing and operating a local high school science fair is available from Science Clubs of America, 1719 N Street N.W., Washington, D.C.

NEW AMA TV FILM

A new twenty-eight-minute dramatic film designed to show the "human side" of medicine is the third in a series of television programs produced by the American Medical Association for use by local and state medical societies. Entitled "Even For One," the motion picture will be available for bookings on local television stations after January 1, 1957.

Central character in the film story is Dr. Harry Austen, the beloved general practitioner in a middle-

(Continued on Page 1444)

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NEW AMA TV FILM

(Continued from Page 1442)

sized town. A crisis develops, however, when a youngster is treated for typhoid fever while other patients displaying similar symptoms are treated for food poisoning. One indignant mother tries to stir up the entire community when Dr. Austen refuses to hospitalize her boy as a typhoid case. After convincing the mother and others involved that he did the right thing, Dr. Austen underscores the importance of the "art" of medicine by saying: ". . . when you call me to your side, you are buying what it has taken me all my life and training to learn . . . you are buying my skill, my art, perhaps . . . but most of all my judgment . . ."

Medical societies interested in sponsoring this television film locally as a public service project should contact the AMA Film Library.

MEDICAL EDUCATION MEETING

Graduate medical education for general practice will be the topic of discussion at the opening session of the Fifty-third Annual Congress on Medical Education and Licensure to be held February 10-12, 1957, at the Palmer House, Chicago. The three-day meeting will be sponsored by the AMA's Council on Medical Education and Hospitals, the Federation of State Medical Boards of the United States and the Advisory Board for Medical Specialties.

Also scheduled for Sunday, February 10, will be a business meeting of the Advisory Board and an open meeting of the Federation. Monday sessions will be devoted to a symposium on "Medical Education Tomorrow" and a program highlighting postgraduate medical education and methods of meeting its challenges. The annual Federation banquet will be held Monday evening. The general subject of "Re-evaluation of the Licensing Examination" will be discussed during the final sessions on Tuesday.

AMA JOINTLY SPONSORS NUTRITION MEETING

"Fats in Human Nutrition" with special emphasis on fats, cholesterol and atherosclerosis will be discussed at an American Medical Association symposium to be held March 15, 1957, in New Orleans. The one-day meeting is sponsored by the AMA's Council on Foods and Nutrition with the co-operation of the Orleans Parish Medical Society, the New Orleans Graduate Medical Assembly, the School of Medicine of Louisiana State University and Tulane University School of Medicine.

Tentatively scheduled are the following presentations: (1) dietary fat—its role in nutrition and human requirement; (2) biochemical aspects of fat, cholesterol and lipoprotein metabolism of importance in clinical medicine; (3) pathologic lesions related to disturbances of fat and cholesterol metabolism in man; (4) epidemiologic studies of diet, blood lipids; (5) metabolic studies of the relationships between dietary fat and serum lipid levels; (6) therapeutic implications of nutritional studies relating to serum lipids. A round

(Continued on Page 1446)

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AMA JOINTLY SPONSORS NUTRITION MEETING

(Continued from Page 1444)

table discussion on fats, cholesterol and atherosclerosis also will be held. Speakers include Drs. L. Emmet Holt, Jr., Donald S. Fredrickson, W. Stanley Hartroft, George E. Burch, Edward H. Ahrens, Jr., Fredrick J. Stare, and Ancel B. Keys, Ph.D.

Physicians (particularly general practitioners), nutritionists, home economists and others interested in this field are especially urged to attend. Further information may be obtained from the AMA's Council on Foods and Nutrition.

AMA SURVEYS HILL-BURTON PROGRAM

An AMA study of the Hill-Burton Hospital Construction Program is now underway. Conducted by the Council on Medical Service, the survey will cover the first ten years of the program's operation. It is being undertaken to determine to what extent the original objectives are being fulfilled, what effect recent progress in medical and hospital care may have had on these objectives, and what changes, if any, might be suggested to improve the program. Since recent amendments to the Hill-Burton program include provisions for diagnostic and treatment centers, this study should prove of particular interest to medical societies and individual physicians.

State medical associations have been asked through a brief questionnaire to report observations to the Council. Individual physicians, also, may have experiences or suggestions to offer. If so, such information should be sent directly to the Council's Committee on Medical and Related Facilities.

AMA-AUTHORIZED HEALTH ARTICLES

In the fall of 1954 a series of health articles was launched in THIS WEEK magazine—the Sunday newspaper supplement—with the co-operation of the American Medical Association. THIS WEEK recently announced that due to the enthusiastic response of readers, a collection of these health articles has been published as a large-sized, hard-cover book entitled "How to Enjoy Good Health" by Random House, Inc. In making the announcement, the magazine said that it was "proud of its association with the American Medical Association and the confidence in our journalistic integrity which that implies."

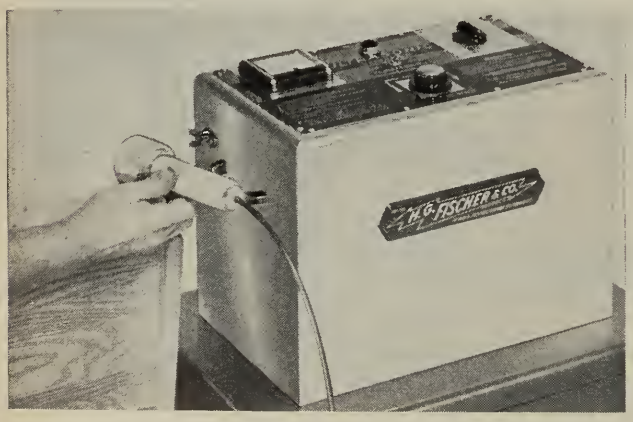
First article in the series was written by AMA's secretary-general manager Dr. George F. Lull. Noted authorities such as Dr. Paul Dudley White and Dr. Jonas E. Salk have brought readers up-to-date information on medical subjects ranging from arthritis to viruses. Each article is written by a top specialist in his field and carefully reviewed by the AMA.

Copies of the book may be secured at most book and department stores or by writing to THIS WEEK magazine, P.O. Box 239, Radio City Station, New York 19, N. Y. Price is $3.95.

(Continued on Page 1448)

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*Schwartz, E.: New York J. Med. 56:570, 1956.

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1 Pollock, B. E., and Pruitt, F. W.: Am. J. M. Sc., 226:172, 1953.

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(Continued from Page 1446)

FILM ON PROBLEMS OF DEAF

An entertaining story depicting the problems and education of a deaf child is portrayed in a 16mm sound film which now may be obtained from the AMA's Film Library. Entitled "Susan's Wonderful Adventure," this twenty-nine-and-one-half-minute color film was produced for the Clarke School for the Deaf in Northampton, Massachusetts, to help create a better understanding between deaf persons and those with normal hearing. The story covers approximately fourteen years in a deaf child's life. It opens with the parent's discovery of Susan's deafness and closes with inspiring scenes at school graduation exercises. There are no professional actors—roles are played by actual deaf children.

NEWSCOPES

Prints of the fifteen-minute *documentary automobile safety motion picture* "On Impact," filmed for the American Medical Association and the Ford Motor Company at the AMA Annual Session in Chicago now are available for showings at medical society meetings or to the general public through the AMA's Film Library. . . . Detailed *bibliographies of source material* on a wide range of research projects in the socio-economic field which were compiled by the Brookings Institution currently are available from the AMA's Council on Medical Service. The eleven sections cover such subjects as cost, financing and economics of insurance (both government and non-government); personnel (physicians, dentists, nurses and miscellaneous); services and related material (selected groups); population, vital statistics and related material; and general background. . . . *A new publication* entitled "Absence from Work Due to Non-Occupational Illness and Injury" has been prepared by the AMA's Committee on Medical Care for Industrial Workers, joint group of the Councils on Medical Service and Industrial Health. Single copies may be obtained free of charge from the Committee; additional copies cost fifty cents.

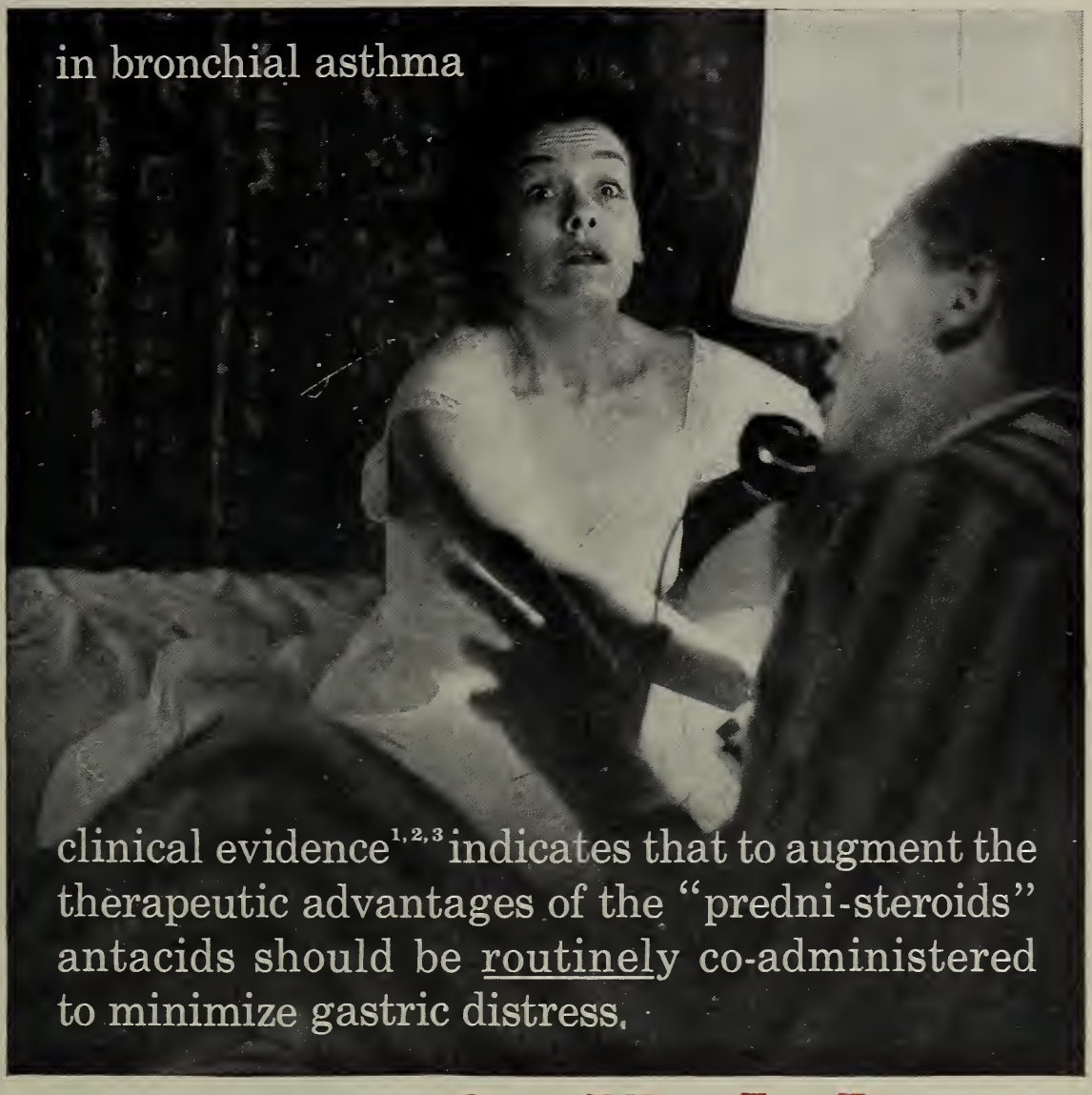
AMA WASHINGTON LETTER

(Continued from Page 1440)

chief of the bureau, to a new Center for Research on Aging at National Institutes of Health; Dr. Donald W. Patrick from the Clinical Center to PHS hospital at San Francisco; Dr. Vane M. Hoge, from associate chief of the bureau to Hill-Burton.

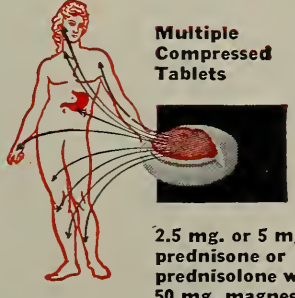
* * *

With the death of Rep. Percy Priest of Tennessee and the election of a Democratic House, Rep. Oren Harris, Democrat, of Arizona, assumes chairmanship of the important House Interstate and Foreign Commerce Committee. It handles most health legislation in the House. The companion Senate Committee on Labor and Welfare again will be headed by Senator Lister Hill (D., Ala.).



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References: 1. Boland, E. W., *J.A.M.A.* 160:613, (February 25,) 1956. 2. Margolis, H. M. *et al, J.A.M.A.* 158:454, (June 11,) 1955. 3. Bollet, A. J. *et al, J.A.M.A.* 158:459, (June 11,) 1955.

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Editorial Opinion

PATIENTS ARE PEOPLE

A working convention of 3,500 members of the Michigan State Medical Society is under way in Detroit, and a study of the program reveals a sturdiness among physicians reassuring to the rest of us.

The burden of messages to be placed before the doctors is that patients are not just ailing bodies, needing treatment of their physical ills.

By such announced discussion subjects as "emotional care," "psychosomatic problems," "psychosomatic aspects," "psychotherapies" and "medical and psychiatric collaboration," the convention leaders are pointing out that patients also are people, needing the "bedside manner" of their doctor as well as his scalpel and a miracle drug or two. The mere nodding visit of the doctor makes the sick feel better.

In effect, it is preservation of the philosophy of the horse-and-buggy doctor who achieved his miracles with 10 grains of aspirin.

Doctors know they must deal with the foibles as well as with the symptoms of their patients. That is the greatest argument against encroachment of production-line medicine. The ultimate in a system of socialized healing, directed by governmental bureaus, would be a neat, departmental division of the human mind and body.

There would be a doctor for the kneecap and a doctor for the ulcers and a doctor for the brain. Unfortunately, the patient who is sick—or only thinks he's sick—is sick all over.

The family doctor knows the whole person of his patient, mind and body. These annual conventions provide him with an academic brush-up on the newer findings that will help him in his work.

—Editorial in *Detroit Times,* September 25, 1956.

DOCTORS' WIVES

The Woman's Auxiliary to the Michigan State Medical Society is holding its convention in Detroit simultaneously with that of the doctor-husband session—and these doctors' wives deserve an accolade all of their own.

They are the opposites of the so-called "office wife." They are home secretaries, receptionists, telehone diplomats and appointment clerks.

When the office day ends, theirs begins.

They must be awakened at predawn hours because of some other woman's baby. They remain home alone during evening office hours when other husbands are with their families. They listen knowingly at the telephone while some chronic ailer details his symptoms, to be relayed to the doctor. They must recognize a truly urgent call.

They dress in new finery for the big party—and then must sit and wait, or go alone, because of an emergency.

They must restore the perspective and the confidence of the physician when he is shaken—when he fears, in self-condemnation, that a little greater skill, a little more knowledge, a little extra time or a little deeper prayer might have saved his patient.

Much has been written, and it should be, about the doctor dedicated to his profession.

His wife's dedication is thrust upon her; she also serves, even when she only sits and waits, and waits, and waits. . . .

—Editorial in *Detroit Times,* September 27, 1956.

SOME DOCTORS SAY

. . . that only indigent patients can be used for clinical material in medical teaching; both undergraduate and graduate, we assume. Much historical basis for such thinking exists, but these are changing times. The theory that a certain amount of personal dignity must be sacrificed by the "teaching" patient has been disproved in many places.

Economic circumstances are changing. Charity patients are becoming fewer. Over half of our population now has hospital or professional insurance; there has been a 75 per cent increase in the past decade; it has been estimated that 85 per cent of the people in this country will be eventually so covered.

The utilization of paying patients in the teaching of residents and fellows is not new; nor is the success of any resident training program dependent on the availability of any particular class of patients. On the staffs of all large hospitals are teachers of outstanding ability and integrity.

Some doctors feel that part of their responsibility to their patients is to protect them from contacts with students or physicians in training lest they find such an experience embarrassing or annoying. This well-intended protection may not be greatly desired by the patient. Often the "teaching" patient has a feeling of participation and realizes that there are advantages to being a subject of study and a teaching example.

There is no reason to believe that paying patients would be unsuitable teaching material. It is likely that often they would be found to be more co-operative, more faithful and more ap-

(Continued on Page 1452)



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COLUMBUS PHARMACAL COMPANY—Columbus 16, Ohio

*Introduced—July, 1954

What Do You Know About the Army Medical Training Programs?

Draft eligible physicians and medical students should look into the Army Medical Service Officer Procurement Programs. The Army has several Medical Service Officer Programs that are very attractive and should be investigated before any decision concerning military service is made. The following procurement programs should be of interest:

Medical Student Programs

The Early Commissioning Program was instituted as a means to provide for a continued relationship between the Army Medical Service and the various medical schools. This program is designed to start at the Freshman level medical student. By enrollment in a medical school, applicants are educationally qualified for appointment as Second Lieutenants, Medical Service Corps, U. S. Army Reserve. One of the main features of this program is the selection of 150 of the outstanding Reserve Officer Medical Students between their Junior and Senior years for six weeks clinical clerkship at U. S. Army Hospitals.

Army Senior Medical Students Program

Appointments as Second Lieutenants in the Medical Service Corps of the Army Reserve are tendered to selected Senior Medical Students. Upon appointment, the student will be called to active duty and will be stationed at his school until graduation or completion of the academic year. Students will receive full pay and allowances while attending school. Students must agree to participate in the National Intern Matching Program, and upon graduation, accept appointment in the Medical Corps, U. S. Army Reserve.

Students must agree to serve on active duty for four years, including Internship, if matched for Army Internship—or three years if matched for Civilian Internship. Both periods exclude active duty in Medical Service Corps as students. In effect, a draft eligible medical student who would normally be drafted for two years of service, would only give one year of service for the one year of active duty he received as a student.

Applications for this program should be made during the Junior year.

Army Medical Intern Program

The Army Medical Intern Program provides for Internships in Army Teaching Hospitals each year to approximately 150 newly graduated Doctors of Medicine. Upon graduation, selected applicants are commissioned as First Lieutenants in the Medical Corps Reserve, and called to active duty for assignments of one year Rotating Internships in Army Hospitals beginning July 1 of each year. The Intern Training Program at Army Hospitals has been designed to meet all requirements of the Council on Medical Education and Hospitals of The American Medical Association. The Army Intern Program is of one year duration. There is no "Pay Back" time in this program.

Priority III physicians continue to serve two years following completion of Internship. Normally, they are promoted to the rank of Captain at this time.

Army Medical Resident Program

The Army Medical Resident Program is designed to provide training in the various Specialties leading to Board Certification, with training being conducted in Army Hospitals with individuals undergoing this training as a Regular Army Officer. Each Officer undergoing this training is required to repay one year for each year of training received.

Breaking down the terms of Military Service payable for this training, let the service eligible physician consider the fact that he will be required to serve a tour of duty of two years in the Armed Services, after which he will doubtless return to take a residency as a civilian. By availing himself of a three year Military Resident Training Program, he is only required to serve approximately one year over and above that period of time he would normally be required to serve.

Released through the Michigan State Advisory Committee to the Selective Service System by Major Arthur W. Barker, Army Advisor—107th Medical Bn, MNG, Detroit, Michigan.

SOME DOCTORS SAY

(Continued from Page 1450)

preciative. Unfortunately, and unjustifiably, the "guinea pig" label has been attached to charity patients, often for rather obvious reasons, but it is doubtful if it can be made to stick.

To the medical student, intern or resident the paying patient more nearly represents his future private patient. The treatment of indigent patients only cannot but distort the relationship of the doctor to the patient and to the community. The patient represents a personality; environment, economic status and emotional influences are important in making a diagnosis.

The concept that the full paying patient liquidates his or her entire medical debt is illogical. A patient's debt to medical science can never be completely discharged by the payment of any sum of money. This is a fact of which the public should be made more completely aware. It should be no secret.—O. A. Brines in *Detroit Medical News,* October 1, 1956.

The JOURNAL

of the Michigan State Medical Society

Issued Monthly Under the Direction of The Council

VOLUME 55 DECEMBER, 1956 NUMBER 12

Radioiodine in Diagnosis and Treatment of Thyroid Disorders

A Review of Current Medical Practice in the Smaller Community

By Clarence P. Chrest, M.D.
Kalamazoo, Michigan

IN THE past ten or fifteen years I think everyone has read or heard of isotopes and some of their applications in medicine. The glowing promises of the immediate postwar years have by now somewhat simmered down and in the embers, a few well established uses in clinical medicine are apparent as well as the fact that they are extremely valuable in a multitude of research and industrial situations. The most widely used isotope in medicine today is Iodine^{131}, a fact which is dependent on the peculiar specificity of iodine for the thyroid gland.

To understand what an isotope is, if we adopt the concept of species of elements in which there are subvarieties, each having its own peculiar, identifying characteristics, we will avoid the complex physical reasons for their particular classification. Suffice it to say that elements differ in their chemical characteristics as determined by the number or deficits in the orbital electrons. Isotopes of an element have identical chemical characteristics but have slightly different mass, because of the presence of additional neutrons, or particles without electrical charge in the nucleus. These isotopes of an element must be separated or purified by physical methods dependent upon slight differences in mass. Some isotopes are stable, but those of the heavier elements, particularly, exhibit a tendency to readjustment within the nucleus which contains more than the usual number of neutrons. With the casting off of an excess neutron, energy levels within the atom change and radiations are produced, and the isotope is said to decay, a process which occurs at a certain constant rate with half its strength disappearing in microseconds for certain isotopes and up to days or thousands of years for some others.

The particles cast out in the readjustment of the unstable nucleus are three kinds and have their own characteristics. The alpha is a heavy, positively charged particle of very short range and requires no further discussion here. The beta particle of light mass, like an electron, and having a range of only a few millimeters in tissue, is the chief emission of radioiodine and responsible for the radiation effects in treatment. The gamma particle is essentially the same as two million volt x-rays, has the speed of light, and is never completely absorbed in tissue, although reduced. This is the particle we measure with the scintillation counter. It is responsible for only about 10 per cent of the radiation effect on the thyroid, but constitutes almost 100 per cent of the radiation hazard because of their infinite range.

Fermi in 1934 produced the first isotope of iodine, I^{128}, with a half-life of twenty-five minutes.

From the offices of Drs. Hildreth, Volderauer, Pearson, Chrest and Gladstone, 458 West South Street, Kalamazoo, Michigan.

Address given before the Kalamazoo Academy of Medicine, February 22, 1955.

In 1938, Hertz, Roberts and Evans first used it in biologic studies and perceived its use as an investigative tool in thyroid physiology. This isotope lacked gamma emission. More important, its short half-life was an overwhelming drawback and today it is only of historic interest. In 1938, Livingood and Seaborg, using the cyclotron, produced three new isotopes of iodine with longer half-life permitting satisfactory use in biologic research. In 1939, Hamilton and Soley first used I^{131} in human beings, and by 1941, Hertz and Roberts treated the first case of thyrotoxicosis. I^{131} loses half its strength in eight days and is the iodine isotope of choice today. After the hiatus of the war years, I^{131} became available in practically unlimited quantities from the atomic piles of Oak Ridge, and in 1946 was released to the medical profession; thereafter, its use as a diagnostic tool and curative agent spread rapidly. From 1946 to 1951 a large fund of clinical knowledge concerning its use was accumulated by investigators in the larger centers.[1]

From the foregoing, there have been these general consequences:

1. A simple and reliable test of thyroid function.
2. The ability to induce a prompt, nonsurgical, remission of hyperthyroidism.
3. Improved results in the treatment of thyroid cancer.

These advantages are now available to patients in smaller communities as physicians qualified to use isotopes medically have increased. Generally speaking, however, at this time thyroid cancer is a research problem insofar as treatment by radioiodine is concerned, and is probably best managed in large centers where patients with this diagnosis are seen frequently. The following remarks then will deal with use of this material as a biologic tracer in the study of thyroid function, and as a source of local internal radiation in the thyroid gland for the treatment of hyperthyroidism in a medium sized community.

Because of its chemical and metabolic identity with ordinary iodine, here then we have a method of labeling chemical elements so that they can later be detected in living organisms without resorting to dissection or any other destructive sampling method. The avidity of the normal thyroid gland for iodine has long been known, and increased or decreased concentrations in the gland had been related previously to physiologic overactivity and underactivity by chemical methods. With this tool then, *in vivo* measurements of the *total amount or rate of uptake* are possible. The scintillation counter can tell us what percentage of the dose of iodine is present in the gland twenty-four hours following ingestion, ordinarily between 15 and 35 per cent in normal people. Usually determination is also made at four hours and in some cases, where hyperthyroidism is suspected, a more critical evaluation, a determination of the rate of uptake, can be made by serial counts at ten-minute intervals for up to two hours, and the resulting curve compared to the range of normal. In any biologic measurement, some overlapping of normal and abnormal occurs at both ends of the scale. It occurs in this test to a lesser extent than in the basal metabolic rate (BMR) and some of the other laboratory tests commonly available.

Werner presents a comparative study of normal subjects having both the BMR and tracer iodine study, this without the refinement in technique in use today, carried out at Presbyterian Hospital in New York several years ago.[2] Of 113 normal subjects, the tracer study found 17 per cent outside the usually established limits of normal, while by the BMR, 28 per cent were outside the normal limits. When the euthyroid subjects whose radioiodine uptakes were outside normal limits were checked against the BMR results, about half were in the range of normal and half were not. When the individuals whose BMR was outside the limits of normal were checked against the tracer study, only about 20 per cent were abnormal on the tracer study. Excitement or emotion limit the value of the BMR, since the inability to relax and increased muscular tonus accompany nervous tension and are reflected by increased oxygen requirements. Muscular exertion before the test, even heavy exercise a day or so earlier, will alter the oxygen requirements. Consequently, repeat studies are frequently necessary on basal metabolism tests, whereas the need for repetition is rare with the tracer study. Finally, there are many other disorders such as leukemia or the lymphomas, hypertensive disease, or fever in which the BMR may be elevated as part of the disorder, unrelated to an underlying increase in thyroid function. Stimulant drugs may have the same effect.

This is not to say that the BMR does not have its value, but like a patient's temperature it is non-

specific and may have various causes. The iodine uptake is related to one thing, thyroid physiology, and reflects changes in the physiology quite accurately. Its severest limitation is a factor which is actually under the physician's control, that is, alteration of thyroid physiology by specific thyroid medication which is reflected in the iodine tracer study. Therefore, the test should be done before the patient receives Lugol's solution, propylthiouracil or its derivatives or dessicated thyroid or thyroxin. Contrast media used in cholecystogram, the pyelogram, bronchogram or myelogram are rich in iodine and will saturate the body for varying periods of time. Also to be watched are the cough syrups many of which contain iodides as well as other proprietary preparations containing iodine or thiouracil-like substances. Where the patient conceals the fact of medication, the cases of factitious hyperthyroidism caused by taking of dessicated thyroid, the discrepancy between the low uptake of iodine which is in the myxedema range, and the clinical appearance of the pseudohyperthyroid patient with an elevated basal metabolic rate can be the clue to an otherwise obscure diagnosis.

It should not be inferred that a laboratory test is a substitute for clinical judgment. The iodine uptake study is a reliable indicator of thyroid physiology but should be interpreted with other information to make the diagnosis. The BMR may be a good test in the average case, but when there is need for a diagnostic test in the borderline case, the tracer dose of radioiodine is more accurate. In the difficult case, a battery of tests is indicated as results of the iodine uptake, BMR, serum cholesterol and protein-bound iodine are correlated with the clinician's judgment to make a diagnosis. In accuracy and availability, the tracer iodine study is most useful and has the advantage of minimum time and discomfort to the patient.[3] This test is performed with accuracy on decompensated cardiac patients, patients with asthma, those with fever or lung pathology, as well as infants and children.

Tracer "mapping" is possible because of the affinity of functioning thyroid tissue, wherever located, for the radioactive labeled iodine. Substernal goiter may be detected in this manner, and various intrathoracic masses or undiagnosed cervical tumors can be studied for possible thyroid activity. A disappointingly low percentage of metastases from cancer of the thyroid retain functional activity, but if they do localization is possible by this technique.

The inherent characteristic of functioning thyroid tissue to concentrate iodine permits internal irradiation of the gland by means of the beta and gamma radiations of I^{131}. The tracer dose is an extremely small amount, while the treatment dose is 400 to 1000 times in magnitude and, being concentrated in the functioning cells, can deliver sufficient radiation to decrease or abate thyroid function. This property of radiation has been known for years and used successfully in x-ray treatment of hyperthyroidism. The advantage of radioiodine treatment is that the radiations are concentrated on the particular cellular elements we wish to change without affecting skin, blood vessels and adjacent structures. The treatment dose is given orally, usually on an ambulatory outpatient basis and without loss of time from the patient's work. The extremely toxic patient is prepared with propylthiouracil and sedation over a period of weeks, similar to presurgical management, except that iodides are prohibited. Side effects of the treatment are so slight as to generally go without notice, but some patients will mention a tightness of the throat about one week following the dosage. Effects on the patient's hyperthyroidism are apparent in three weeks to two months. If further treatment is required, this is established by evaluation at the end of about three months.

Proper selection of patients for medical thyroidectomy is just as necessary as with any surgical procedure, if good results are to be obtained. Generally speaking, all patients with diffuse toxic goiters with or without exophthalmos are good candidates. Those with nodular goiters are probably best treated surgically, but can be accepted for this treatment if they are a poor surgical risk because of age, cardiac, renal or other complications. Regression of the nodules following usual treatment dosage for thyrotoxicosis is good evidence for their benign nature, since this amount of radiation will leave malignant nodules relatively unaffected. Consequently, the indication for surgery in a questionable case of malignancy is removed and the thyrotoxicosis relieved. Postsurgical recurrences of diffuse or nodular toxic goiter may be treated, and certainly should be, if there has been injury to recurrent laryngeal nerve. The patient who is intolerant of antithyroid drugs is also a candidate. Pregnancy is an absolute contraindication, as the fetal thyroid concentrates iodine after the third

month—a fact which also makes the diagnostic tracer dose unsatisfactory after the second month of pregnancy. Surgery is desirable for young women in the child-bearing years, although some physicians accept these patients for treatment and by now many have had normal children following treatment. Any suspicion of malignancy or of nodularity of the gland in young people is an indication for surgery. Large glands are relatively resistant and best treated surgically. Possibility of carcinogenesis is generally believed to be small, but this question cannot be settled for many years. To date, after fifteen years of radio-iodine therapy, no cases of malignant breakdown traceable to radiation are reported. However, it is advisable to reserve radio-active iodine treatment to those patients over forty years of age. High risk patients, or those refusing surgery, are the exception to this rule.

It would be possible to give a single sufficiently large dose of iodine to induce remission in 100 per cent of patients, but the incidence of hypothyroidism would be prohibitively high. Furthermore, there is a tremendous variation between patients in the radiosensitivity of the thyroid gland. It is preferable to select a smaller dose initially and treat again those patients who do not obtain remission after one dose.

A summary of twenty published reports on over 1700 cases published by 1952[1] indicated satisfactory remission in 80 per cent, a hypothyroid rate of 9 per cent, unsatisfactory result in 5 per cent, and incomplete information on the remainder. More attention to selection of patients and in particular to dosimetry has shown improvement in results since that time. Aiming at a step-like remission, Gordon and Albright[4] reported on 120 patients in whom they have obtained the following results: 49 per cent were euthyroid with a single dose, 79 per cent obtained remission with a second dose, 92 per cent obtained remission with a third dose, and 98 per cent had remission with a fourth dose; 1.6 per cent (two patients) required more than four doses; and posttherapy hypothyroidism occurred in 2.5 per cent of cases. An incidence of hypothyroidism around 15 or 20 per cent more nearly approximates the experience of most clinics.

These are impressive results and show what can be accomplished by deliberate step-wise remission. Other careful workers are duplicating these results.

Blumgart[5] has recently published the results of his treatment of incapacitated euthyroid cardiac patients with radioiodine. Rationale of the treatment is that lowering the total metabolism of the patient so reduces the systemic circulatory requirements as to place them within the limits of the cardiac reserve. Review of 1070 patients from his and other clinics showed that in angina pectoris, the treatment was worthwhile in 75 per cent, with excellent results in 40 per cent and good in 35 per cent. In congestive heart failure, the treatment was worthwhile in 62 per cent, with excellent results in 23 per cent, good in 39 per cent, and considered not worthwhile in about 40 per cent. This procedure is palliative for cardiac cripples and should be regarded as an adjunct to recognized medical measures. It is unwise to treat patients who are in terminal phases of their diseases, particularly since two to six months intervene before the hypometabolic state is attained. A daily dosage of dessicated thyroid is usually administered then to maintain the lowest metabolic rate consistent with comfort.

Similarly, in those unfortunate patients with chronic and disabling pulmonary emphysema, the reduction of the patient's metabolic requirements to a level within reach of the pulmonary reserve by a medical thyroidectomy offers the possibility of rehabilitation. These patients must be carefully selected for this form of treatment following a thorough trial of usual medical measures.[6] Certain cases of severe Parkinsonism are benefited greatly by medical thyroidectomy, as pointed out by Schwab and Chapman[7], but only a small series of this type of case have so far been assembled.

Summary

Test of thyroid function with radioactive iodine is the most accurate method available outside of metropolitan centers and offers advantages in convenience and ability to study patients with pulmonary or cardiac disease or fever. Treatment of thyrotoxicosis with radioiodine is now available to many smaller communities. Medical thyroidectomy is safe and offers the possibility of rehabilitation in selected cardiac patients who have angina or decompensation, and in disabling pulmonary emphysema.

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(Continued on Page 1477)

What is New in the Treatment of Ulcerative Colitis?

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DURING recent years a number of significant advances have been made in the management of ulcerative colitis. As a result, the outlook for patients with this disease is much brighter than ever before: many more patients respond to a medical program; of those who are subjected to ileostomy and colectomy, most are rehabilitated and returned to a normal, active and useful life.

Essentially, the new treatments of ulcerative colitis take the form of improvement and refinement of the basic medical program of the past, in the four following ways: (1) We use a highly effective new drug, azulfidine; (2) we use steroid hormones; (3) we use newer methods of nutrition in selected cases; and (4) in the event the patient needs a surgical procedure, he now has the advantage of the advances made in surgery and of the improvements made in ileostomy appliances.

Azulfidine

In our opinion, the most effective drug used in ulcerative colitis during recent years is azulfidine. It is an azo compound of sulfapyridine and salicylic acid, chemically combined (benzolsulfonyl-(amino-pyridine)-aza-salicylic acid). It was first referred to as salicylazosulfapyridine, then as salazopyrin and later as azopyrine. Now it is called azulfidine. Dr. Nanna Svartz of Sweden introduced this drug in 1948, though she had used it on patients with rheumatoid polyarthritis as early as 1942. Noting favorable effect on the arthritis of these patients, she then employed it for the arthritis associated with ulcerative colitis, with clinical improvement of both arthritis and ulcerative colitis.

In 1948 Svartz[1] reported her results for 124 patients with chronic ulcerative colitis and/or rheumatoid arthritis. Of the patients with colitis, ninety per cent responded promptly to this drug by amelioration or complete disappearance of signs and symptoms. One year later, Bargen[2] reported encouraging results in eight of twelve cases. In 1953, Morrison,[3] in his study on sixty patients over a three-year-period, reported that seventy per cent of his patients either became symptom-free or improved on azulfidine therapy, compared with 37 per cent of similar results in a control series of patients.

Svartz,[4] summarizing her twelve years' experience with azulfidine, during which time she treated 366 patients, reported that 84 per cent of the 366 ulcerative colitis patients improved on therapy with this drug. In 5 per cent of her patients the drug had to be discontinued owing to side effects, principally drug-fever and rash. Five patients developed leukopenia. It should be noted, however, that Morrison[3] found that 21 per cent of his patients revealed an intolerance to the drug: headaches, nausea, dermatitis or secondary anemia.

More recently, Bargen[5] related his experiences with the drug in over 600 cases. He stated: "It is the most valuable drug that has been introduced for the treatment of ulcerative colitis in the years that I have been interested in this problem."

We used azulfidine (as an adjunct drug) in thirty-two patients, particularly in the chronic patients who develop periodic relapses. The drug comes in one-half gram tablets. We usually prescribe two tablets (1 gram) four times daily; at times, two tablets are given every three hours during waking hours, two weeks on and one week off. Twenty-three (71 per cent) of our patients improved considerably while on azulfidine therapy. Some patients did well on prolonged use of the drug, daily, for months and months, using only one tablet four times a day. These patients, however, are not cured of the disease. Rather, improvement or a remission results. Reduction in number of stools and bleeding usually occurs within a few days to a week. Occasionally, a patient may develop nausea and at times headache. One of our patients developed leukopenia which cleared up shortly after the drug was discontinued. Nevertheless, our experience with azulfidine is

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Presented by Dr. Sandweiss before the Tenth Annual Michigan Clinical Institute, Detroit, Michigan, March 9, 1956.

most encouraging. Despite the fact that we have no data on a simultaneously treated control series, (with another drug or with a placebo) we are of the opinion, based on our past experience, that azulfidine is definitely a valuable adjunct to our therapeutic regimen for this disease. At times the addition of azulfidine to the basic medical program produces dramatic results.

It is not definitely known how azulfidine acts to produce clinical improvement. However, Svartz[4] refers to S. Helander, who found through fluorescence microscopic investigations that this compound has an affinity for connective tissue. Svartz reasons that "since the main changes in cases of ulcerative colitis are localized within the submucous connective tissue, it is bound to be advantageous" to treat this affection with such a drug. Whatever the rationale, I have no hesitancy in suggesting that this drug be given a trial in recurrent, moderately severe cases of ulcerative colitis.

ACTH, Cortisone and Meticorten

The first reports on the use of ACTH and cortisone in ulcerative colitis appeared in 1950.[6,7] Since that date, the literature in this country and in England records 506 cases.[8] Seventy-six per cent of the patients were improved during therapy with these hormones.[6-16]

A review of these published reports warrants the following summary:

1. Nearly all authors agree that ACTH and cortisone are capable of inducing a clinical remission in some cases of ulcerative colitis. As stated above, of 506 cases reported in the literature, 76 per cent were improved.[8]

2. These hormones are most effective in the fulminating phase of the disease and also during periods of toxic exacerbations which are associated with such complications as arthritis, erythema nodosum, pyoderma gangrenosum and iritis.

3. In the acute fulminating phase of the disease, when ileostomy is under serious consideration, use of the hormones may initiate a remission and make surgery unnecessary or convert an emergency operation into an elective procedure.[17]

4. Clinical remissions, when they occur, are similar, as a rule, to those seen without steriod therapy; however, they occur sooner than without steriod therapy.[15]

5. These hormones do not cure ulcerative colitis. They are used only as adjuncts and not as substitutes for the basic medical program.

6. Relapses are common and may occur at varying intervals after hormone therapy is discontinued; repeated courses of hormone therapy may induce further remission, though this does not always follow.

7. Kiefer and Elliott,[11] Wirtz, Rehfuss and Yantes,[12] Elliott and Giansiracusa,[16] as well as Kirsner and Palmer,[15] observed a number of patients who have enjoyed uninterrupted remissions while taking small doses of ACTH or cortisone over a period of several months. Whether these hormones have a sustaining effect in the same way that ACTH and cortisone have in many cases of rheumatoid arthritis deserves further study.

8. ACTH and cortisone are "powerful drugs" and *should not be used indiscriminately.* The patients must be observed carefully for complications, the symptoms and signs of which may at times be masked. The following complications and side effects have been reported: (a) Large undermined longitudinal ulcers in the rectum and colon without significant fibrosis;[18,19] (b) recurrence of peptic ulcer or new ulcer formation;[20,21] (c) retention of sodium, loss of potassium and also decrease in intracellular potassium;[22,23] (d) gastrointestinal hemorrhage;[5] (e) perforation of colon with peritonitis;[18,24-26] (f) intercurrent infection as pneumonitis or cellulitis;[26] (g) septicemia;[15] and (h) hypercortinism.[5]

We employed these hormones in nineteen patients with good results in thirteen (68 per cent). Ten of the thirteen patients subsequently developed recurrences. Five of the ten patients were later subjected to elective surgery. These nineteen patients were among the more acutely ill patients in our series of fifty-two.

In the acute toxic phase of the disease, we administer ACTH daily as an intravenous drip, 20 mg. in 1,000 cc. of 5 per cent glucose in water over a six- to eight-hour period. When clinical improvement occurs, the dose of ACTH is gradually reduced and then discontinued, usually within a week or 10 days. In the moderately severe toxic cases we administer ACTH parenterally, 80 mg. daily in divided doses. With clinical improvement, the dose of ACTH is gradually reduced until discontinued. In less severe cases that fail to respond to the usual medical program, we prescribe cortisone orally. Initially, we administer 200 mg. daily, in four divided doses, for

a period of two days. On the third day, the dose is reduced to 100 mg. daily, and three days later to 80 mg. daily in four divided doses. The latter dose is maintained for about a week to ten days, when the dose of cortisone is further reduced gradually until discontinued. We have not used hormones longer than three to four weeks. Our patients have not experienced any of the complications listed above.

The mechanism by which these hormones benefit ulcerative colitis is not known. The beneficial clinical effect may conceivably be due to nonspecific action of the hormones. However, whatever the mechanism, it appears that these hormones have definite value in selected cases of ulcerative colitis. Their administration tends to decrease fever, decrease the number and fluid-content of the stool, improve the patient's sense of well-being and improve the appetite. But they must not be used indiscriminately because serious complications may and do occur occasionally during their administration.

We have had no experience with Meticorten® (prednisone) in ulcerative colitis. Dr. G. Kenneth Hawkins[27] of Schering Corporation advised us that he has in his files reports covering twenty-nine patients treated with varying dosages of this hormone. He stated that "best results seem to occur with high dosages of 60 to 80 mg. or more daily. Of these twenty-nine patients, thirteen had excellent results; eleven had good results; one, a fair result and four poor results."

Kirsner[28] also employed Meticorten® in ulcerative colitis, apparently with encouraging results. "The daily dose varies from 30 to 60 mg. in divided amounts. Occasionally we have given as much as 80 and 100 mg." At these larger dosage levels, hypercortinism and gastrointestinal complications may occur, as with the other steroids.

Nutrition

With progression of this disease a variety of systemic disturbances may occur. While the literature refers to many nutritional, metabolic and other complications, we in our practice have been confronted chiefly with nutritional problems and associated systemic complications, such as arthritis, erythema nodosum, pyoderma gangrenosum, uveitis and, occasionally, iritis. Patients with nutritional deficiencies are usually in a state of protein deficiency and negative nitrogen balance.[29] Because of anorexia, their caloric and protein intake are inadequate. Moreover, they lose considerable protein in the stool in the form of blood, pus and mucus. These patients not only must have between 3,000 to 3,500 calories per day, but also, must have 125 to 150 gms. of protein per day to permit tissue regeneration and repair and to establish a state of positive nitrogen balance. A change to a positive nitrogen balance may herald clinical improvement.[29]

We have found several propietary interval feedings helpful, at times, in increasing the protein and caloric intake:

Predigested Protein (Ledinac).—One tablespoon as a serving, dissolved in milk or fruit juice or water. It adds 2.16 grams of carbohydrates, 2.7 grams of protein and 0.216 grams fat—a total of twenty-one calories per serving. Four servings per day provide an additional eighty-four calories.

Emulsified Fat (Ediol).—One ounce (two tablespoons) as a serving, diluted in milk or fruit juice. This adds 150 calories as predigested fat. Four servings (two tablespoons each) add 600 calories per day.

A preparation of Sustagen, Meritene,*** (Sugar and Water—Sustagen—9½ teaspoons, Meritene—2 teaspoons, sugar—2 teaspoons, chocolate flavoring—1 teaspoon, and water ¾ cup).—This preparation may be served at 10 A.M., 2 P.M., and 6 P.M. Each serving provides approximately 105 grams of carbohydrates, 30 grames of protein, nine grams of fat—a total of 620 calories. Three daily servings supply an additional ninety grams of protein and 1,860 calories.

Fortified Milk Mixture.—A cup of powdered skim milk when added to a quart of milk adds 42 grams of protein, 1 gram of fat and 62 grams of carbohydrates—a total of 425 calories. Three glasses of this milk mixture, i.e., one glass between meals and at bedtime, as three interval feedings, provide 45 grams of protein, 24 grams of fat and 72 grams of carbohydrates—a total of 660 calories. Dextri-Maltose may be added for additional carbohydrates and calories if indicated. This mixture is the least expensive supplementary or interval feeding and is as effective as any of the others mentioned, in those tolerant to milk.

Tube Feeding of Homogenized Foods (Barron Pump).—All too frequently these patients do not

*Sustagen, a powder containing powdered whole milk, non-fat milk solids, calcium caseinate, dextrose and Dextri-Maltose plus vitamins and iron.

**Meritene, a whole protein supplement, fortified with vitamins and minerals.

TABLE I. FORMULA FOR CONTINUOUS HOMOGENOUS TUBE FEEDING
(Barron Pump)

Ingredients	Measures	Grams	P	F	COH	Cal.
Pureed liver	1 cup	250	40.0	9.7	2.5	270
Egg white	9	250	27.0	2.0	—	125
Egg yolks	15	250	40.7	79.7	1.7	902
Skim milk powder	1 cup	250	89.0	2.5	130.0	905
Pureed peas	1 cup	250	1.7	0.5	32.8	127
Liquid skim milk	6¼ cups	1500	52.5	1.5	76.5	540
Dextri Maltose #1	7½ cups	850	—	—	850.0	3400
Emulsified fat (Ediol)	6⅔ tbsp.	100	—	50.0	12.5	500
Total			251.0	146.9	1106.0	6769
1 quart contains:			84	49	369	2256

Note: Mix ingredients skim milk powder, dextri-maltose, egg white, egg yolks, liver, peas, and emulsified fat (Ediol) together, and stir in a bowl or a mixer until a smooth paste is obtained without lumps. Add liquid skim milk and continue beating until mixed thoroughly. Strain through a gauze or fine mesh strainer. Keep in refrigerator.

consume an adequate diet even though served with expert help of a patient dietitian. In these patients we resort to the recently introduced method of tube-feeding described by Dr. James Barron. By this method some of our patients have been fed approximately 1,100 grams of carbohydrates, 250 grams of protein and 150 grams of fat, totalling about 6,800 calories in each twenty-four hours (Table I), with sufficient minerals and vitamins, and have gained fifteen to twenty pounds in weight in two to three weeks. In my opinion this is a major advance in the care of the chronic malnourished debilitated patient whose appetite is at a low ebb and who will not or cannot eat.

At times, however, we are disappointed even by this method of treatment. Several of our patients were fed this highly nutritious diet by means of the Barron pump for periods of two weeks or more, without improvement in their physical status, and with little, if any, gain in weight. These patients are being studied now at Sinai Hospital of Detroit by Dr. Stanley Levy and myself. We are measuring both absorption and excretion of isotope-tagged basic food substances "oleic acid I^{131} and methionine S."[35] Our data at present are too limited to permit definite conclusion; however, it appears that patients with ulcerative colitis have an impairment of absorption of these basic food substances, particularly methionine.

Complications and Indications for Surgery

Because of the chronicity of the disease and the not infrequent occurrences of local and systemic complications and, more especially, because of the encouraging results of recent advances in surgery, there is a trend toward earlier ileostomy and colectomy for patients with chronic ulcerative colitis. Improvement in the design of ileostomy appliances has also stimulated this trend. Recent reports appear to justify the trend. Lahey[30] reported on the postoperative mortality of two series of cases with ulcerative colitis: Of 141 ileostomies performed prior to 1947, the postoperative mortality was 18 per cent, while of 102 ileostomies performed between 1947 and 1951, the postoperative mortality was only 2 per cent. More recently, Cattell and Colock[31] noted that "at present the mortality ranges from 1 to 2 per cent." Ferguson[32] reported a mortality of 3.3 per cent in ninety patients. He stated, "One hundred per cent of our patients on their own admission considered themselves improved; 88 per cent of them indicated that they are in excellent or good health." Bacon and Trimpi[33] performed colectomy with excision of the rectum in forty-five patients with a rehabilitation rate of 91 per cent. These and other reports[34-38] indicate that most patients who undergo ileostomy and colectomy return to a normal active and useful life. As a result, Bacon and Trimpi[33] recommended colectomy for borderline cases, long before patients develop the classic indications for operation. They stated that, "weighted against the low surgical risk and the inconvenience of a permanent ileostomy are the benefits of cure of the disease, removal of a precancerous bowel and prevention of thromboembolic disease and a reversal of degenerative liver, kidney and arthritic changes." Suggestions have been made,[33,39,40] that patients with a history of ulcerative colitis of from five to ten years' duration, who still have the disease, should have an ileostomy and colectomy. In fact, Wheelock and Warren[41] recommended this surgical procedure in patients who have had the disease three years or longer.

We object to this trend because the advances in medical measures (nutritional therapy, control of infection with antibiotics, the use of azulfidine and the steroid hormones) enable many patients with chronic ulcerative colitis to do well on a medical program. Also, recent publications stress the reversibility of the disease[42,43] a phenomenon which we also have observed on several occasions. Because of these considerations, we agree with Zetzel[44] that, "it would be most unfortunate if this wave of surgical enthusiasm resulted in too early operation for too many patients." We recommend ileostomy and colectomy only for those patients who have the following conditions, regardless of

TABLE II. RESULTS OF MEDICAL THERAPY
Fifty-two Patients

Duration of Disease	Very Good	Good	Fair to Poor	Poor: (Surgery Performed)
Less than 1 year	—	—	1 (poor)	1
1 year to less than 3 years	5	2	1 (fair)	2
3 years to less than 5 years	—	1	—	3
5 years to less than 10 years	5	5	—	—
10 years to less than 15 years	6	6	—	—
15 years to less than 20 years	3	2	1 (fair)	1
20 years and over	—	5	1 (fair)	1
Total	19-37%	21-40%	4-8%	8-15%*

*Six of these eight patients are in excellent health. The seventh patient died of a coronary thrombosis two months after ileostomy and colectomy. The eighth patient had a resection of the right colon for carcinoma of the cecum six years ago, and is free from metastasis. (See foot note on page 1466.)

Note: Twenty-six (50 per cent) of the fifty-two patients have had ulcerative colitis longer than ten years; fourteen (twenty-seven per cent) longer than fifteen years; and seven (thirteen per cent) longer than twenty years.

TABLE III. RESULTS OF MEDICAL TREATMENT
Fifty-two Patients

Very good		
Asymptomatic 1 to 2 years—7		
Asymptomatic 2 to 4 years—9		
Asymptomatic 4 to 6 years—2		
Asymptomatic 6 to 7 years—1	19-37%	
Good	21-40%—	77%
Fair to poor	4- 8%—	8%
Poor—Surgery performed	8-15%—	15%
Total	52	100%

TABLE IV. INDICATIONS AND RESULTS OF SURGERY
(Eight Patients in a Series of Fifty-two)

Patient	Duration Prior to Surgery	Indications for Surgery	Type of Surgery	Present Status
S.B.	3 years	Frequent BMs; malnutrition; cramps.	Ileostomy (1955) Sub. Col. (1955)	Excellent (1 year)
B.P.	4 years	Frequent BMs; malnutrition; cramps.	Ileostomy and Sub. Col. (one stage)(1955)	Excellent (1 year)
W.G.	26 years	Frequent BMs; malnutrition; cramps.	Ileostomy (1954)	Excellent (2 years)
L.S.	2 years	Frequent BMs; malnutrition; cramps.	Ileostomy (1952) Sub. Col. (1954) Perineal Resec. (1955)	Excellent (4 years)
M.A.	5 years	Frequent BMs; malnutrition; cramps.	Ileostomy (1949) Sub. Col. (1949)	Excellent (7 years)
M.L	Less than 1 yr.	Deep rectal ulcer; partial rectal stricture; malnutrition.	Colostomy (Trans. colon) 1946	Excellent (10 years)
H.S.	2 years	Toxic episodes; pseudopolyposis; glomerulitis; hypertention.	Subtotal Colectomy (1955)	*
B.Z.	15 years	Adenocarcinoma of cecum.	Sub. Col.; Ileo-Transv. colostomy (May 1950)	Free from metast.; (6 years)

**See foot note on page 1466.

*This patient died of a coronary thrombosis two months after subtotal colectomy.

Sub. Col.—Subtotal Colectomy.

the duration of their illness: (1) Acute fulminating colitis, not responding to adequate medical therapy; (2) perforation; (3) rectal and colonic stricture and obstruction; (4) extensive perirectal infection and fistulae; (5) carcinoma or defect suspected of being carcinoma; (6) profuse hemorrhage or repeated severe hemorrhages; (7) extensive secondary polyposis; or (8) semi-invalidism.[45]

Report of Cases

The usual medical regimen, as is well known, consists of symptomatic and supportive measures. The basic measures are as follows: (1) Physical and mental rest; (2) a low-residue, high-protein, high caloric diet or parenteral feedings when necessary; (3) vitamin supplements; particularly A, B, C and K; (4) drugs to control symptoms, such as sedatives, antispasmodics, opiates; (5) drugs to control infection, such as the sulfonamides and antibiotics; (6) iron preparations or blood transfusions to correct anemia when present; and (7) measures to resolve emotional difficulties, if possible.

These measures, applied in varying degrees for different patients, are still basic. With them, and with the newer techniques and drugs described above, my associate and I have had highly satisfactory results.

During the past ten years we have treated medically, in our private practice, fifty-two patients suffering from chronic ulcerative colitis. We have classified our results as follows (Tables II and III): (1) *Very Good*—those without symptoms now and for one or more years; (2) *Good*—those asymptomatic now but who are still subject to occasional mild recurrences of diarrhea. These patients in general, are in a good state of nutrition, pursue their usual occupations, and are not incapacitated by their disease though some of them may require brief periods of hospitalization; (3) *Fair to Poor*—those with repeated recurrences of symptoms, frequently requiring hospitalization or suffering from malnutrition or complications, and (4) *Poor*—those who required surgery.

The results in nineteen (37 per cent) of our patients are classified as very good; twenty-one (40 per cent) as good; and four (8 per cent) are still under treatment and classified as fair to poor (Tables II and III). In the remaining eight patients (15 per cent), medical treatment alone was inadequate, but surgery yielded excellent results in six of them. A seventh patient made satisfactory progress but died a few months later from a coronary thrombosis; and the eighth patient, who was operated on for cancer of the cecum,

is now six years after operation free from metastasis (Table IV)*

In all, nearly 90 per cent of our fifty-two patients are now either in very good or in good health. We are fortunate, indeed, in not having had either a medical or a surgical mortality in our series of fifty-two patients.

Does Higher Incidence of Cancer of the Colon Warrant Earlier Surgery?

The exact incidence of carcinoma of the colon in patients with ulcerative colitis is not known. However, it is generally accepted that the incidence is higher than in the general population of the same age and that it increases with the duration of the disease. The pathogenesis of the neoplasms is believed to be chronic inflammation and irritation, resulting in hyperplasia, proliferation and finally carcinoma.[46]

A review of the literature to 1944 by Lynn[47] indicated a 1.9 per cent incidence of carcinoma in 1467 case (Range: 0-6.3 per cent). A review of the major reports in the literature from 1944 through 1951 by Machella[9] reported an incidence of 3 per cent among 6,890 cases (Range: 0-7 per cent).

Bargan and his associates[48] recently reported on a follow-up study of 1564 patients with chronic ulcerative colitis who had been examined at the Mayo Clinic from January 1, 1918, through December 31, 1937 (fifteen to thirty-five years ago). Ninety-eight (6.2 per cent) of the 1564 patients "subsequently had malignant lesions of the rectum or colon and died." His data indicate that "on the average the death rate from cancer of the rectum or colon among persons with ulcerative colitis is, say thirty times as frequent as that in the general population of the same age and sex." He added, "The patient with ulcerative colitis, however, should not be unduly alarmed for the annual death rate from cancer of the colon or rectum among persons with ulcerative colitis is estimated to be between one and two per hundred."

Of significance is a report on two different series of cases by Kiefer et al.[49] Of 458 patients studied by roentgenography and sigmoidoscopy, the incidence of carcinoma of the colon was 1.9 per cent. In the second series of 226 patients who either came to surgery (214 cases) or came to autopsy (twelve cases), the incidence of carcinoma was 4.4 per cent.

In surgically treated cases and in patients with long-standing ulcerative colitis, the incidence of carcinoma, as reported in the literature, appears alarmingly high. While Lyons and Garlock[35] reported an incidence of 3.9 per cent in 226 surgically treated cases, Bacon and Trimpi[33] and Counsell and Dukes[36] each reported an 11.1 per cent incidence in forty-five and sixty-three surgically treated cases, respectively. Wheelock and Warren[41] reported an 8.8 per cent incidence of carcinoma of the colon in 319 patients. They studied patients who lived ten or more years after the onset of ulcerative colitis and who did not have colectomy before ten years had elapsed.

Dennis and Karlson[37] reported a 20 per cent incidence among those with colitis for over twenty years. Lahey[34] indicated a malignancy rate of "about 30 per cent" in patients who had had the disease with their colon intact ten years.

Lyons and Garlock[35] and Counsell and Dukes[36] reported the highest incidence of carcinoma. In twenty-five cases of ulcerative colitis lasting over twelve years, the incidence of cancer was 36 per cent.[35] In sixteen cases of ulcerative colitis involving the rectum and lasting over twelve years, the incidence was 43 per cent.[35] Among eleven surgically treated cases with a history of ulcerative colitis for more than ten years, there were five cases of carcinoma—an incidence of 45.5 per cent.[36]

In general, these published reports definitely indicate that there is a greater tendency for the occurrence of carcinoma of the colon in patients with ulcerative colitis and that the incidence increases with the duration of the disease. However, we question whether the alarmingly high incidence of cancer indicated above represents the true incidence of carcinoma among patients with ulcerative colitis, even among those having the disease longer than five to ten years. Is it not possible that the nationally known medical institutions attract the more seriously ill patients, most of whom had failed to respond to medical management, and who represent the very group in whom the incidence of colon cancer is high? In this connection, it is important also to recall the

*While this paper was awaiting publication, this patient developed another primary malignant lesion in the sigmoid. This lesion was resected June 19, 1956, and an end-to-end anastomosis was done. There was no evidence of metastatic intra-abdominally from either the first or the second primary lesion. Microscopic examination revealed an adenocarcinoma with invasion of the muscle coats, without involvement of lymph nodes. The patient has been well to date (Nov. 30, 1956).

reports of Felsen and Wolarsky[51] and Lagercrantz[52] who failed to find a single case of carcinoma among 855 and 134 cases, respectively, of ulcerative colitis; Felsen and Wolarsky's series included 134 patients with pseudopolyposis. Over a ten-year period, out of fifty-three cases studied, Ransom[53] found two (3.8 per cent) patients who developed cancer of the colon or rectum. In our series of fifty-two cases, seen over a ten year period, there was only one case with carcinoma of the colon (2 per cent). It should be noted that twenty-six (50 per cent) of our patients have had the disease longer than ten years, fourteen (27 per cent) longer than fifteen years, and seven (13 per cent) from twenty to thirty-five years. The patient who developed cancer of the cecum had chronic ulcerative colitis fourteen years at the time surgery was performed.

Our experience with the incidence of cancer in this disease leads us to believe that the true incidence is nearer the 2 to 4 per cent figure mentioned by Lynn,[47] Machella[9] and Ransom.[53] This incidence does not warrant routine removal of the colon in all longstanding cases of ulcerative colitis. Because the operation of ileostomy and total colectomy themselves entail a mortality, a morbidity, and the difficulties of leading of an ileostomy-life, great caution continues to be warranted in recommending surgery in any but reasonably clear cases. Even if cancer of the colon develops, the prognosis is not hopeless. Reports have recently appeared on a number of patients with five-year postoperative survivals.[17,46,54] The patient with cancer of the colon in our series is alive and free from metastasis six years following resection.*

Summary

Without minimizing the seriousness of the local and systemic complications that sometimes occur among patients with chronic ulcerative colitis, and without minimizing the difficult therapeutic problems that exist when these complications occur, it can be generally stated that as a result of the noteworthy progress that has been made in both the medical and surgical approach to this disease, the outlook for patients with ulcerative colitis is better today than ever before. About 80 per cent of the patients respond satisfactorily to a medical regimen. Of the patients who are subjected to ileostomy and colectomy, most are rehabilitated and returned to normal, active, useful lives.

The following advances have highlighted the progress made in recent years in the medical care of these patients: newer and better means of supplying a nutritious diet; newer drugs, such as the sulfonamides, the antibiotics, azulfidine and the steroid hormones; and newer and better means of controlling fluid and electrolyte losses when these exist. These advances are largely responsible for the increase in the incidence of remissions, the decrease in the incidence of emergency ileostomies and, in the better preparation of the patient for the ordeal of surgery when surgical intervention is indicated.

The achievements in the surgical and postoperative care of these patients are no less noteworthy: ileostomy and colectomy are now being performed in one stage with a low mortality rate; the complications that were associated with the ileostomy stoma have been appreciably lessened; and ileostomy appliances have been improved considerably. As a result, both patient and physician look upon surgical intervention with much greater assurance than before when indications for surgery occur.

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MILLIONS SPENT ON RESEARCH BY NON-GOVERNMENTAL LABORATORIES

National Science Foundation reports that in 1953, latest year for which such figures are available, a total of about $85 million was spent on scientific research in nonprofit and commercial laboratories. Commercial organizations spent close to $35 million, and nonprofit organizations more than $50 million.

The figures are contained in a NSF publication, Research and Development by Nonprofit Research Institutes and Commercial Laboratories. The report was prepared for the foundation by Maxwell Research Center of Syracuse University. It is part of an extensive survey of research and development in all known United States nonprofit institutions and a sampling of the work in commercial laboratories.

The rapid increase in research—most of the units studied were founded since 1941—is attributed by NSF largely to the expansion of the federal research grants program and to federal aid to private research groups. In 1953, the United States grants made up about one-half of the total spent in commercial research laboratories, and two-thirds of the money spent by nonprofit groups.

Chlorpromazine in the Treatment of Mild Behavior Disturbances

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THE INCREASING concern of parents regarding the emotional well-being of their children has confronted the physician with an enlarging segment of practice devoted to behavior disturbances of varied severity. Child psychiatrists, mental hygiene clinics, mental institutions, and special schools have assumed, by and large, the responsibility for the diagnosis, care, and treatment of the severe behavior disorders or major mental ailments of children. The much more prevalent milder behavior deviations occurring in infancy and childhood present a challenging array of problems to the general practitioner or pediatrician.

A high proportion of the emotional upsets in younger children (evidenced by such symptoms as temper tantrums, sleeplessness, and anorexia) may be reactions to stresses accompanying normal physical development. As the child grows older he may exhibit behavior deviations which reflect feelings of anxiety and insecurity resulting from tensions in his family or social environment. These reactions may also occur in children who do not have sufficient outlets to release the often turbulent emotions which accompany normal growth and development. Typical of these behavior disturbances are aggressiveness, undue shyness, and hyperactivity. Physical symptoms such as urinary disturbances and tics are also frequently encountered.

The child's anxiety and tension are often doubly reflected in his parents whose concern may be much greater than the seriousness of the problem would warrant. It behooves the physician to provide these distraught people with at least temporary help. Psychotherapy for parents and child, although desirable, is time consuming and usually not feasible. Published studies[1,2] have demonstrated the effectiveness of chlorpromazine* in the treatment of severe behavior disturbances; none, however (at least to our knowledge) has reported on the use of the drug in treating comparatively mild disturbances. Accordingly, the following study was conducted to evaluate the drug's efficacy in treating these conditions.

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*Thorazine, Smith, Kline & French Laboratories, Philadelphia, Pa.

Method

The study was conducted on twenty-two children selected from private practice. Each was chosen for treatment only after his parents had appealed for aid in coping with the child's symptoms. Chlorpromazine was not given to children whose behavior difficulties were only casually referred to, nor to those whose parents seemed to accept such behavior as part of the vicissitudes of child rearing.

Chlorpromazine was given three or four times a day in a syrup containing 10 mg. of the drug per teaspoonful, or in 25 mg. or 50 mg. tablets. The total daily dose was 1 mg. per pound of the child's weight; only occasionally was it necessary to increase the dose to obtain the desired clinical effect. The treatment was never given for more than two weeks, irrespective of the results obtained.

Results

Response to medication was determined by observations of the child and interviews with him and with his parents. Results were classified as "good" if the child experienced a complete or almost complete alleviation of symptoms; as "poor" if symptoms were only partially relieved or not relieved at all. Because of the essentially subjective nature of determining response, no attempt was made to use more exactly defined criteria to classify results.

Of the twenty-two children treated, fourteen experienced a good result; eight a poor result. In the latter group were several children who were treated for some specific difficulty (e.g. poor school adjustment, erratic sleeping habits, excessive fears) but who were not subjected to intrafamily tensions, and whose adjustments were otherwise within normal limits.

One patient experienced a drowsiness which

disappeared after the dose was decreased. No other undesirable side effects were noted.

Case Histories

The following brief case histories illustrate the good results obtained.

Case 1.—M.P. was a four-and-one-half-year-old boy who was a very tense, unhappy child with aggressive behavior toward his parents and sister. He showed improvement after being on 30 to 40 mg. Thorazine daily, and became quieter and more manageable.

Case 2.—G.B., a three-year-old boy was a very hyperactive child, restless, tense, with poor appetite and an inability to gain weight. After a few weeks on 25 mg. of Thorazine daily, he gained one and one-half to two pounds, became much less nervous and irritable, and more easily managed. He began to resume his daily nap, and slept better in general.

Case 3.—S.C., who was a nine-and-one-half-year-old girl, suffered from cerebral palsy with petit and grand mal convulsive attacks which were incompletely controlled with anti-convulsive drugs. After starting Thorazine, her mother noticed a definite improvement in the child's general behavior. Although her attacks persisted, she became much easier to manage.

Case 4.—G.R., a girl, aged nine, revealed poor school adjustment, and also had difficulty in falling asleep. There had been no gain in weight or height for from six months to a year, even after the use of adequate doses of thyroid. After Thorazine was administered her mother reported a "different child." There was marked dramatic improvement in her school behavior, eating, sleeping, and general deportment. She gained three pounds in one and one-half months.

Case 5.—L.G., a girl, aged two-and-one-half-years, was overactive and had poor sleeping habits. On 30 mg. of Thorazine daily, much improvement was noted by her mother. The child was more easily managed, slept better, and appeared much more relaxed.

Case 6.—E.M., a three-and-one-half-year-old girl, was a very nervous, irritable child who slept and ate poorly, and was quarrelsome and disobedient. When she was given 3 teaspoons of Thorazine Syrup daily her mother noticed "amazing results." The child gained weight as her appetite improved, and she became more obedient and more easily managed. When she awakened in the morning, a smile replaced her usual grouchiness. Throughout the day she appeared happier and more sociable.

Case 7.—L.S., aged nine years, was a nervous, tense boy with stuttering of moderate severity. After the first few days of therapy he showed great improvement in his speech. He was then taken to an Eastern city by his parents to attend a wedding, after which he relapsed to his former state of nervousness and speech disturbance.

Case 8.—F.C., a three-year-old girl, had been hospitalized for genitourinary workup because of nocturia and the frequent and urgent necessity to urinate during the day. After one week on 40 mg. of Thorazine daily no definite change was noted. However, when the dosage was increased to 60 mg. daily the mother reported a marked improvement. The urinary symptoms including the nocturia completely disappeared. Her temperament became more even, and she was more easily managed and less nervous.

Case 9.—E.B., aged seven years, was a very nervous, irritable boy, with poor sleeping habits. He was argumentative, rude, and displayed aggressive behavior. He was put on 60 mg. of Thorazine daily, after which his mother noticed definite improvement in behavior. He began to awaken in a happier frame of mind, and showed much less irritability. His sleeping pattern became normal. He became more easily managed and was no longer argumentative or aggressive.

Case 10.—F.R., a four-and-one-half-year-old girl had symptoms of nervousness, extreme frequency and urgency of urination. Her general deportment improved and her urinary symptoms completely disappeared after a course of treatment with Thorazine.

Case 11.—D.A., aged four-and-one-half-years, had very poor sleeping habits; she would awaken hourly during the night. She was a very tense, nervous child. After Thorazine was administered, her sleep became entirely normal. Her disposition and deportment also showed remarkable improvement.

Case 12.—B.P., aged nine, was a malnourished colored girl whose chief complaint was persistent head nodding for two months. 60 mg. of Thorazine was prescribed daily, and her symptom disappeared.

Case 13.—H.D. was a two-year-old colored boy who was very tense and irritable, cried excessively and banged his head day and night. Very shortly after starting Thorazine his mother noted a rather dramatic improvement. The head banging completely disappeared, his disposition brightened, and he appeared much happier. The mother commented upon the "tremendous relief" she secured. The family's sleep was no longer interrupted.

Case 14.—P.K., aged eight, was a high-strung, emotional, hyperactive boy. He became much more relaxed and less active after Thorazine was administered.

Discussion

It is true, of course, that many mild behavior deviations are self-limiting and often represent temporary disturbances. Is it desirable, then (in view of chlorpromazine's possible side effects) to treat them with this potent drug? The answer would seem to be "yes" if, as it so often happens, the child's behavior and unhappiness impose an insufferable burden on the parents. Chlorproma-

zine should not be used promiscuously to treat benign or trivial problems.

That the drug is effective in treating mild behavior problems is evidenced not only by the number but by the kind of results obtained. In several patients the response was quite dramatic. It should be stressed that chlorpromazine is not a definitive therapy for behavior problems. It should be considered as a symptomatic or stop-gap approach to an often complex problem.

If no beneficial results are ascertainable within a few days, chlorpromazine should be discontinued. At best, the therapy should not be extended beyond two weeks. With these precautions, deleterious effects from the use of the drug would seem to be negligible. It was our impression that even such short-term use of this medication effected a more than temporary improvement in the child's behavior, attitudes, and disposition. Even the temporary "breathing spell" provides significant relief for the parents' emotional tensions; and helps them to reorient and realign their approach toward their children's behavioral and emotional needs.

Summary

The use of chlorpromazine (Thorazine) as tranquilizing medication in children with behavior disturbances of minor severity is presented. Beneficial results were noted in fourteen of the twenty-two children treated. The improvement in these children helped them and their parents to attain a greater degree of harmony and emotional stability in their relationship. In selected cases, the drug is effective in moderate dosage when given for short periods of time. Dramatic improvement is often apparent. Under these conditions no adverse reactions were observed.

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RETROLENTAL FIBROPLASIA

Retrolental fibroplasia was first recognized as a disease of premature infants in 1942 and is now the major cause of blindness among children. Oxygen administration to premature infants was implicated as a possible cause in 1952. Premature infants should be given additional oxygen only in emergencies and then for as brief periods of time as possible. Three Detroit researchers based this recommendation on a recent study which showed that length of exposure to oxygen is the important factor in producing retrolental fibroplasia, a serious eye disease which may result in blindness. This differs from earlier studies indicating that the concentration of oxygen was the causative factor.

However, because the disease appeared to occur haphazardly and because no information was available on death rates due to curtailing oxygen for premature infants, doctors have been reluctant to change their routine of oxygen administration.

The report in the October *Archives of Ophthalmology,* published by the American Medical Association, is based on a co-operative study made in eighteen hospitals between July 1, 1953, and June 30, 1954, in an attempt to clear up questions about oxygen's effect on RLF and mortality rates.

Of the 786 premature infants born in or brought to the eighteen hospitals during the year, 586 were followed for at least two and a half months. Fifty-three infants were given oxygen for twenty-eight days, the standard procedure at the time. The other 533 infants were given oxygen only when breathing difficulty occurred.

The study showed that on a percentage basis, twice as many infants in the routine-oxygen group developed the early active stages of the disease as did infants in the curtailed-oxygen group. The rate of progression to the later scarring (cicatricial) stages which produce permanent damage to the eyes was three and a half times greater in the routine-oxygen group than in the curtailed-oxygen group.

The rate for both active and cicatricial stages increased as the duration of exposure to oxygen increased, but was not affected by the concentration. Rate of withdrawal from oxygen did not appear to play a role, they said.

The incidence was much greater in infants of multiple birth (twins or triplets) than of single birth. The authors said the reason for this is unknown, but it may be related to the degree of oxygen saturation in the blood. A multiple-birth infant might have less oxygen in his blood before birth than a single-birth baby. When he is given additional oxygen, a relatively greater difference in blood-oxygen saturation before and after birth could result, which might be "a greater insult" to the blood vessels of the eye.

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The co-operative study was supported by grants from the National Institute for Neurological Diseases and Blindness of the U. S. Public Health Service, Bethesda, Md., the National Foundation for Eye Research, Boston, and the National Society for the Prevention of Blindness, New York.

Three-year Study of Gall-bladder Surgery at Detroit Receiving Hospital

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THE SUBJECT of gall-bladder and common duct surgery will always be an interesting one for many reasons. Some of these cases are anatomical and others involve the nature of the disease and how to approach it. As yet, the exact cause of the inflammatory process and the deposition of gallstones is not precisely known. The diagnosis is occasionally in error, as exemplified by a preoperative diagnosis of cholecystitis and a right upper quadrant incision being followed by an operative finding of no pathologic lesions of the gall bladder. Likewise, cholecystectomy is not always followed by relief of the symptoms for which the patient was operated upon. Noteworthy in any sizable group of cases is an occasional failure to include gall-bladder disease in the differential diagnosis of some other condition. The indications for which individual surgeons recommend cholecystectomy are more or less uniform, with a possible difference in opinion as to the timing of surgical intervention in the face of an acute attack of the inflammatory process. Finally, the discovery of an obstructing stone after common bile duct exploration varies somewhat with each individual surgeon's indications for such exploration.

With these thoughts in mind, we set out to review the operations performed on the gall bladder and common bile duct at Detroit Receiving Hospital in the years 1951, 1952 and 1953. The items examined in each record included the history, physical findings, laboratory studies, roentgenographic studies, operative findings, pathologic diagnosis, postoperative complications, morbidity and mortality. In 1951, there were eighty-six cholecystectomies, and in twenty-three of these cases the common duct was explored. In 1952, sixty-eight cholecystemtomies were performed, of which twenty-one were combined with common duct exploration. In 1953, there were eighty-six cholecystectomies, of which thirty were accompanied by choledochostomy. The ratio between the two procedures is nearly the same each year, in that the common duct was explored in a little less than one-third of all cases in which the gall bladder is removed. A collective review[7] of 25,807 operations for chronic cholecystitis yielded a 23 per cent incidence of common duct exploration.

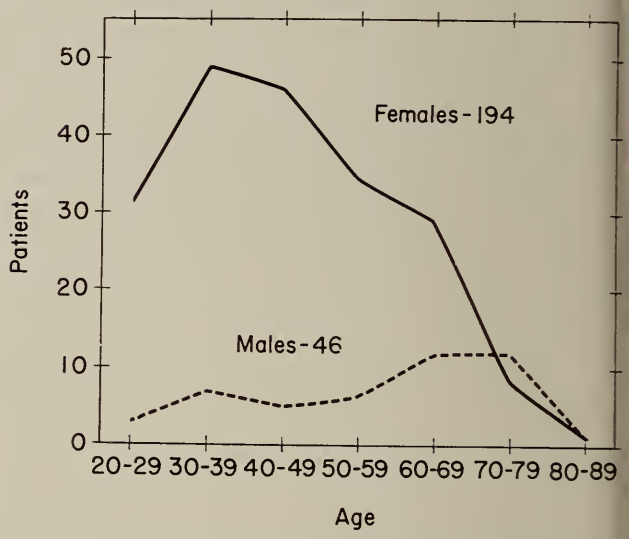


Fig. 1. Number of cholecystectomy operations performed on 240 patients according to the age of the patient.

Age and Sex

If the patients are separated into age groups according to sex, the ratio of female to male in the third to the sixth decade is roughly ten to one. The peak age incidence in the female occurs in the fourth decade (Fig. 1). However, in the seventh and eighth decades, the relative incidence of gall-bladder operations in the male increases not only in respect to the female of similar age but also in respect to the younger male. Insofar as a relatively small number of gall-bladder operations may indicate the overall incidence of cholecystitis, this would tend to support the suggestion made by Robertson[6] that as the advanced decades are approached, the incidence of gall-bladder disease in the two sexes tends to become equal.

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Symptoms

Attention is now directed to the symptoms as recorded in the histories (Fig. 2). In general, all the patients had either right upper quadrant

240 Cholecystectomies

100 %	right subcostal or epigastric pain
60 %	right subscapular pain radiation
85 %	nausea - vomiting
65 %	fatty food intolerance
80 %	right subcostal tenderness
20 %	muscle spasm

Fig. 2. Incidence of symptoms and signs in patients with cholecystitis and/or cholelithiasis.

pain or epigastric pain, and it was not possible to differentiate the pain localization in respect to any other variable in the clinical picture, such as an increase in epigastric pain with jaundice or in those patients who required common bile duct exploration. Radiation of the pain to the right subscapular region posteriorly occurred in nearly two out of three patients with a fair degree of regularity. Radiation of pain to the lumbar region was only rarely recorded. Nausea with or without vomiting was a consistent symptom and occurred in 85 per cent of the operated cases. There was no demonstrable increased incidence of involuntary vomiting in those patients with common duct distention as has been described.[8] The only other regularly occurring symptom was a history of fatty food intolerance, which occurred in two out of three patients regardless of the type of operative procedure performed.

A history of jaundice could be elicited (Fig. 3) in 30 per cent of the group undergoing duct exploration, while less than 10 per cent of the group undergoing cholecystectomy alone presented this finding. A decrease in stool pigmentation with darkening of the urine was present in 30 per cent of the former group and 20 per cent of the latter. Chills and fever occurred in 10 per cent of both groups of patients. The significant occurrence of these symptoms in the patients who presented no indication for common duct exploration has been used to indicate that there is in some cases extension of the inflammatory process from the gall bladder to involve the liver directly or the associated hepatic bile ducts.[2,4,5]

Physical Findings

The physical findings were those usually described in cholecystitis. In most cases the findings of at least four observers are present on the

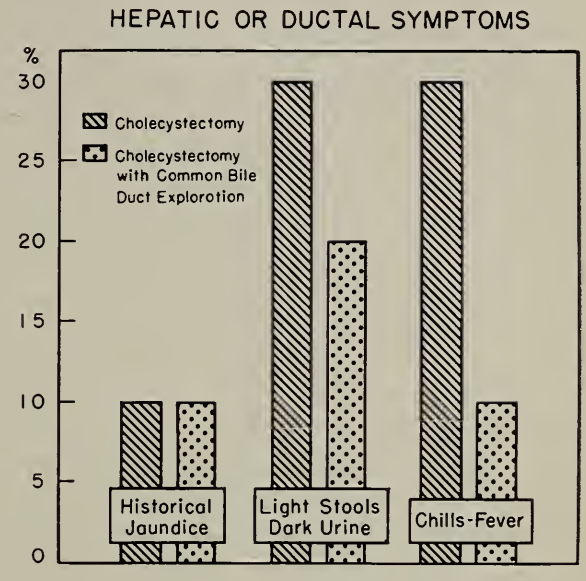


Fig. 3. Comparison of specific symptoms in patients receiving cholecystectomy (a) with and (b) without common bile duct exploration.

charts, and if any one of these observers noted a positive finding in the signs it was tabulated as being present. With the exception of those patients admitted for interval cholecystectomy, all of the remaining patients had some elevation of temperature on admission to the hospital. For the most part, this consisted of low-grade fever, but temperatures up to 103 degrees were recorded in a few patients admitted with early empyema of the gall bladder. Eighty per cent of the patients had subcostal tenderness (Fig. 2) at the time of admission. Twenty per cent had muscle spasm in the right upper quadrant and this spasm was fairly consistently associated with leukocytosis, prolonged operating time and a microscopic tissue diagnosis of acute inflammatory disease in the gall bladder. A palpable mass in the right upper quadrant occurred in almost one-third of the patients. The presence of this palpable mass was not limited to those patients with acute severe gall-bladder disease, and in many cases it was thought to be a palpable liver. Therefore, no correlation of a palpable globular mass to the clinical picture could be determined.

Laboratory Findings

In reviewing the laboratory work, the admitting white blood count was above 15,000 in thirty-

five cases, roughly paralleling the presence of subcostal muscle spasm. The serum bilirubin was determined in most patients and the immediate value was at the upper limits of normal with the exception of the few patients with clinical obstructive jaundice. The cephalin flocculation test was done in approximately one-half of the cases and ranged from a trace to 4 plus in 10 per cent. However, there was an equal percentage of elevated values in those patients undergoing cholecystectomy alone and those requiring duct exploration in addition to removal of the gall bladder. The alkaline phosphatase was determined in 25 per cent of the patients and was significantly higher (6 to 8 Bodansky units) in those requiring common duct exploration. The serum amylase determination was done in 50 per cent of the cases and was elevated in only six patients, all of whom had pancreatitis diagnosed at the time of operation. A prothrombin time and a serum protein and albumin to globulin ratio study failed to reveal anything significant relative to the gall-bladder disease. These tests of liver function were useful only in the general preoperative evaluation of the patient, as were the urinalysis and electrocardiogram.

Roentgenographic Studies

The Graham-Cole test or cholecystogram was done in 189 of the 240 patients and the results of the study were as follows: ninety patients had nonvisualization of the gall bladder but no definite stones were seen; ninety-four had decreased gall-bladder function and a definite diagnosis of cholelithiasis. Only two patients had radiopaque stones discovered on a routine flat plate of the abdomen. Therefore, the majority of gall-bladder calculi were nonopaque and were visualized in 50 per cent of the studies only because of the ability of the gall gladder to concentrate the dye sufficiently to outline the stones. Five patients had the cholecystogram reported as normal. In reviewing these cases, one of the reports was discovered to be in error and stones in the gall bladder could be seen when the roentgenogram was re-evaluated by the radiologist. Two of the cases rechecked were equivocal. Two studies were completely normal. In these five patients, two points of interest were noted. The first, the reason for operation even in the face of reported normal cholecystographic studies; and the second, the findings at the time of operation. Four of the patients were operated upon because of persistent symptoms and the other because of jaundice. All five of the cases with reported normal cholecystograms had pathology in the gall bladder. Four had cholelithiasis and cholecystitis and one patient had a thickened gall bladder, hepatitis, and periduodenitis.

Operation Without Roentgenogram

The fifty-one patients who were operated upon without having a cholecystogram were examined to determine for what reason the roentgenographic study was omitted. Twenty patients were operated upon shortly after hospital admission because of a diagnosis of gall-bladder empyema and impending perforation. An acutely inflamed gall bladder was removed in each case. In twelve patients, no cholecystogram was performed preoperatively because these patients had fluctuating extrahepatic jaundice presumably due to stones. There was a miscellaneous group of patients, twelve in all, who had the cholecystogram omitted for reasons such as palpation of stones at some previous operation, seven cases; a previous cholecystostomy with removal of stones, two cases; a traumatic perforation of the gall bladder, one case; a cholecystoduodenal fistula demonstrated on a gastrointestinal roentgenogram, one case; and finally one case was operated upon after a remission of a typical gall bladder attack on the basis of history and physical findings alone. Of special interest were seven patients who were misdiagnosed preoperatively. Five of these had a preoperative diagnosis of perforated peptic ulcer, for which an Amendola incision[1] was made only to be followed by a lateral extension of the incision because of an early acutely inflamed gall bladder. Two patients had right lower quadrant incisions with a preoperative diagnosis of acute appendicitis, followed by right upper quadrant incisions, when the diagnosis of acute cholecystitis was made on exploration.

Incidence of Gallstones

The incidence of gallstones in the entire group of 240 cases was determined by checking the operative reports and the pathology reports. From these, it was found that stones occurred in all but twelve patients, an incidence of 94 per cent. One of these twelve patients had a normal gall bladder, a cholecystectomy being done because of symptoms and a failure to demonstrate any other

pathologic condition. One case presented a microscopic diagnosis of severe acute cholecystitis, which was noted at operation and for which reason the gall bladder was cultured. The culture was negative. One case presented a chronic cholecystitis with a content described as sludge, and eight other cases were all diagnosed as chronic cholecystitis, each associated with some other pathologic state, such as pancreatic disease or hepatitis. The cholecystectomy done for traumatic perforation of the gall bladder was the other instance of a stoneless organ being removed. Although no long-term follow-up was done in this study, it is to be mentioned at this point that cholecystectomy performed in the absence of stones in the gall bladder has not infrequently been followed by unsatisfactory results in the relief of the patient's preoperative symptoms.[3]

Severity of Inflammation

An attempt was made to evaluate the condition of the gall bladder at the time of its removal according to the severity of the existing inflammatory process. However, this was extremely difficult since the microscopic diagnoses were noncontributory in this respect and analysis of the physical findings and laboratory studies proved to be inconsistent compared to the duration of the symptoms. As previously mentioned, twenty patients were operated upon immediately on admission because of the severity of their disease, signs of toxicity, high fever, and leukocytosis of 17,000 or more. The remaining 220 cases were divided according to the number of days between the remission of the attack of cholecystitis as determined by the patient's symptoms and the day of surgery. Seventy-nine cases were done as interval cholecystectomies, there being a period of at least three weeks prior to surgery during which the patient had no symptoms. Ninety-six cases were operated upon in what was presumably a subacute stage, in that from eight to twenty-days had elapsed since the remission of symptoms and operation. Sixty-five of the cases were done in the seven days immediately following an acute attack. The final group of so-called acute cases are in the group in which a delay in surgery is occasionally recommended. However, if morbidity is evaluated by the number of days of hospitalization required after surgery, those patients operated upon during the acute phase of their disease did not remain in the hospital any longer than those in the subacute or interval groups. The average length of postoperative hospital care required by all three categories was from eight to nine days. Likewise, if morbidity is evaluated by postoperative evaluation of temperature to any significant degree, in this case above 100 degrees, there is little difference between the three groups. The average length of elevation of temperature for the acute cases was slightly more than two days, while in the other two groups it was slightly less than two days.

Indications for 74 Common Duct Explorations

49	historicol joundice with duct dilotion 26 of these had duct stones
14	duct dilotion olone 2 of these hod duct stones
11	miscelloneous One of these hod duct stones

Fig. 4. Indications for and results of exploration of the common bile duct at the time of cholecystectomy.

Common Duct Exploration

An evaluation was made of the indications for common duct exploration (Fig. 4). In 65 per cent of these patients, duct exploration was carried out because the patient had historical jaundice. At the time of operation these patients also had dilated common ducts and this group had the greatest incidence of stones recovered from the duct. Twenty-two per cent of the patients were submitted to choledochostomy because of dilatation of the common duct alone. Only three of these choledochostomies yielded stones. There were eleven patients who had duct exploration for miscellaneous reasons, including lesions of the pancreas, periductal adhesions and the presence of multiple small stones in a gall bladder with a dilated cystic duct. Of these eleven, only one patient had choledocholithiasis. Of the seventy-four common ducts explored, 43 per cent yielded stones. This is comparable to the previously mentioned collective review in which the incidence of common duct exploration was 23 per cent and stones were found in about 50 per cent of the cases explored. It is of interest to note that the average age of those patients having common duct calculi was fifty years, which is in keeping with the reports that the incidence of

choledocholithiasis is greater in the older age groups and greater in those patients having the longest histories of gall-bladder disease.

Morbidity

The incidence of wound and other complications is difficult to evaluate because of the large number of observers involved in writing the progress notes on this number of patients. However, if attention is directed to those patients who were still in the hospital ten days or longer following surgery, some concept of the complications becomes evident. There were seventeen such cases in the cholecystectomy group, nine having wound infections. Of the remaining eight patients, two developed thrombophlebitis, two patients had prolonged copious drainage of bile for eight days, one patient developed a subhepatic abscess and one patient had to be re-operated upon on the second postoperative day for bleeding from the operative site. No source of bleeding was discovered at the second exploration. The wound infections were all related to prolonged operating times of the order of two and one-half hours or more and were evenly distributed between the previously mentioned groupings of acute, subacute and interval cases. Of the seventy-four choledochostomies, there were three complications recorded. Two of these were wound infections and one patient developed a subdiaphragmatic abscess.

Mortality

There were six deaths in the group having cholecystectomy alone. Two patients died of myocardial infarction on the second and third postoperative days, respectively. One patient died of a postoperative intraperitoneal hemorrhage. There was one death due to cerebral embolism in the immediate postoperative period. The patient having traumatic perforation of the gall bladder had, in addition, contusion of the ileum, laceration of the Falciform ligament and multiple fractures. He died nine days after his exploration and cholecystectomy. One death occurred in a patient who had a cholecystectomy performed at the same time that a ventral hernia was repaired. An ileocutaneous fistula developed and the patient died on the twenty-second day following his surgery. The three fatalities accompanying common duct exploration resulted from the following: One of the patients was an aged man who developed pneumonia and died on the twenty-second postoperative day. One patient developed a fistula following an implantation procedure of the common duct into the duodenum. This was performed because a large stone had eroded and necrosed the distal end of the common duct. The patient was re-explored on the sixth postoperative day and died the following day. The final case was an elderly male who was found to have nonresectable carcinoma of the liver at the time of his surgery. He had an episode of hematemesis on the third postoperative day and exsanguinated. The ages of these patients who expired following simple cholecystectomy averaged sixty-four years, the youngest being forty-seven years of age.

Cholecystostomy

The surgical management of the acutely inflamed gall bladder which is operated upon early because of impending gangrene presents two choices of procedure, cholecystectomy or the more conservative cholecystostomy. During this three-year period, there were twenty-five gall-bladder drainage operations in which a tube was placed in the evacuated gall bladder and the abdomen closed. About one-third of these operations were in patients over seventy years of age, and only five were done in those below age fifty. The ratio of females to males was two to one. As might be anticipated, these patients presented problems in anesthesia and the technical removal of an acutely diseased and hyperemic gall bladder wherein identification of the limits of the cystic duct and gall-bladder wall were difficult. There were seven deaths in this small group, a mortality of 28 per cent.

Comment

The treatment applied to the patients presenting presumptive evidence of an acutely inflamed gall bladder at Detroit Receiving Hospital is determined by several factors. Uncontrollable is the fact that in most instances the patient is new to us and has not been seen on a previous hospital admission or followed in the Outpatient Department for symptoms typical of gall-bladder disease. Consequently, a diagnosis of gall-bladder disease without evaluation of previous attacks and subsequent roentgenographic examination is subject to error. The number of such cases which are operated upon is not available in this study be-

cause they are coded under the corrected diagnosis; however, acute inflammations of the pancreas, appendicitis and perforated ulcer are the chief offenders. Fortunately, these relatively few cases are far outweighed by the patients treated by cholecystectomy or cholecystostomy for acute gall-bladder inflammation on the basis of similar history and findings.

For the most part, patients with acute cholecystitis accomapnied by muscle spasm, marked leukocytosis and toxicity arrive at the hospital relatively soon after the onset of the acute episode, often a matter of hours. Elderly patients and patients with a history of no previous attacks interpretable as gall-bladder disease are regarded as immediate candidates for surgical intervention. The elderly individual with a toxic process does not well tolerate prolonged periods of interval observation in order to definitely establish a diagnosis. In the latter group, a history of similar previous attacks presumably is accompanied by the development of adhesions and scarring, thereby lessening the risk of rupture of a gall-bladder empyema. First attacks, on the other hand, are more susceptible to rupture during a period of observation and the indications are therefore toward immediate surgery if the diagnosis has been made and the inflammatory process appears to be progressive.

The majority of potential cholecystectomy patients admitted with symptoms are in a subacute stage. A Levine tube is placed in the stomach for continuous suction, which in effect is a form of biliary decompression. Pain relief, intravenous therapy and repeated observation complete the initial therapy of which the re-evaluation after three to six hours is most important. In a few cases an increasing leukocytosis, tachycardia, fever and persistent muscle spasm are then regarded as indications for surgical intervention. The more frequent hospital course is a subsidence of symptoms and findings over two hospital days with subsequent roentgenographic studies and further evaluation. As is evident in this study, many of these patients are then operated upon within seven days after the subsidence of their symptoms.

Summary

An analysis of 240 patients undergoing cholecystectomy at Detroit Receiving Hospital during the years 1951, 1952 and 1953, is presented. The age of the patients, histories, physical findings and laboratory studies are noted. The roentgenographic examination is evaluated along with the reasons for operating without such examination. Presented are the incidence of cholelithiasis, indications for common duct exploration and the finding of choledocholithiasis. An evaluation of the severity of the inflammatory process at the time of surgery is made. Morbidity and mortality are recorded.

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The Routine Postoperative Letter to the Patient

By Walter W. Hammond, Jr., M.D.
Plymouth, Michigan

RECENTLY I had a telephone call from a patient in which she stated that she had been examined in the Department of Gynecology at the University Hospital, and that she was being referred to the Surgery Outpatient Department for an examination of her breasts. Inasmuch as I had removed a tumor from one of her breasts five years ago, she asked what she could tell them about it. I immediately asked her if she had kept the letter I sent her after her surgery, and she replied that she had it. I told her to take it along and show it to the examining physician, that would be all that she would need. The letter to which I referred was as follows:

August 20, 1950

Dear Mrs. W.:

Due to the fact that so many patients have been encountered who do not know what previous operations were performed upon them, it was thought advisable to supply each patient with a short record of her case.

On June 19, 1950, you had an excision of a tumor from the right breast performed under adrocaine anesthesia in my office.

The pathologist's report was as follows:—"A pericanalicular and intracanalicular adenofibroma, which also shows some of the epithelial changes which are found in mastopathia cystica. No malignancy."

Your progress was satisfactory.

Sincerely,
W. W. Hammond, Jr., M.D.

For the past nine years I have sent this type of form letter to all patients with few exceptions. In the case of children, the letter was sent to the mother of the child. Most surgeons tell their patient what procedures they performed a day or two after the operation, but it has been my experience that very few patients remember what was told to them. If they had a cholecystectomy and appendectomy, they do remember that they had a "gall bladder" operation but they do not remember what was said about the appendix. When it is given to them in the form of a letter to be kept, they can refer to it to refresh their memory or show it to another physician for his edification. The terms used in the letter frequently do not mean much to the patient. They ask about them and I try to explain. They are told that the two most important words in the letter are at the end of the report from the pathologist—"No malignancy." Usually the report from the pathologist is edited and abbreviated so that it contains only positive statements and none of the questions raised by the pathologist. In the case of patients who are in the medical profession, the full report from the pathologist is given.

The first paragraph is the same in all of these letters. In the second paragraph the date and place of hospitalization is stated. The date of operation is given along with the list of surgical procedures. An example would be, "You were a patient in Sessions Hospital, Northville, Michigan, from January 4, 1953, to January 15, 1953. On January 5, 1953, you had an appendectomy, right oöphorectomy and right salpingectomy, performed under sodium pentothal and ether anesthesia." In the third paragraph, the report from the pathologist is given, in a similar fashion to the one in the letter to Mrs. W.

The fourth and last paragraph is usually one of these three sentences:

Your convalescence was satisfactory.

or

You were advised to have periodic examinations relative to possible recurrence.

or

The final results of this surgery are unknown inasmuch as you did not keep your last appointment.

Comment

If this letter is shown to another physician, he has most of the pertinent information he needs. If he desires more information, he knows where to get it.

This letter, sent about two months after surgery frequently reminds the patient to make another appointment for the final examination. Sometimes it reminds him to make another payment on his account.

In case of malignancy in which the wife does not wish to tell her husband, which I believe is her prerogative, she is handed the letter at the time of an office visit, although having the letter around the house is like a wife who indulges in a little

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Submitted for publication, October 6, 1955.

Prevention of Postoperative Pain in Rectal Surgery

By Eugene Laurisin, M.D.
Detroit, Michigan

POSTOPERATIVE pain following anorectal operations has always been considerably greater and more prolonged than pain after other operations. Many patients are aware of this. Consequently, it is not surprising that the majority of them prefer to put it off and drag around with their trouble for years. This delay often causes a minor ailment to develop into one of a more serious and extensive nature. Therefore, it becomes obvious that any method which will alleviate postoperative pain is of great benefit to mankind.

Much of the distress can be alleviated or completely obviated by the careful employment of local infiltration of long-acting analgesics. General anesthesia, spinal anesthesia and caudal analgesia all have their place in proctology, but they should not be used without supportive prolonged local anesthesia. Every physician who does rectal surgery should become adept in the use of prolonged local anesthesia, so the patients will not suffer needlessly.

It has been claimed that this will produce sloughs due to prolonged stay in the tissues. Experience shows that slough results in most cases from improper technique, like pooling and uneven distribution. With the proper aseptic handling before the injections are made, analgesia is prompt, lasting and uncomplicated.

The analgesia and the concomitant temporary partial incontinence will last from one to four weeks depending on the amount and kind injected and on the extent of the infiltration.

The oil soluble formulas lasts longer but it is more difficult to inject and distribute evenly and deeply. The water soluble preparations give shorter anesthesia and are to be injected more superficially. The finger may be inserted in the rectum to act as guide and guard against penetration of the rectal wall.

Water solubles are being marketed by a number of companies: Merrill of Cincinnati (Diothane), Farnsworth of Chicago (Quinocaine). The oil solubles, which are of a longer-lasting effect, are marketed by Abbott (Zylcain), Ciba (Nupercain in oil), the Columbus Pharmacal Co. (Proctocain ampules) and C. F. Kirk Co. (Rectocain oil soluble anesthetic in ampules).

It is a slow progress from the time when Yeomans, Mathesheimer et al in the New York Polyclinic developed the oil solubles. The conservative group of rectal surgeons is still reluctant to learn and use prolonged anesthesia; however, progress can not be stopped, and this procedure is being encouraged by Yeomans, Mathesheimer and others who followed and modified the solutions while reporting excellent results: Barr, Bacon, Spiesman, Cantor, Lieberman, Coleman and others, just to name a few well-known men of this specialty.

It is to be hoped that the occasional rectal surgeon will familiarize himself with this prolonged anesthesia, especially when it is more suitable and advantageous for all concerned. Economic reasons as well as remote locations from hospitals will give the doctor opportunity to help his patient without hospitalization.

The majority of proctologic problems can be diagnosed and treated by the general practitioner; however, he must always include sigmoidoscopy as part of his routine physical examination. More than one-half of all rectal cancers can be found by digital examination. If the general practitioner is not prepared for a sigmoidoscopy, every patient with or without symptoms should be referred to some one who is so equipped and knows how to do it correctly. Such procedure by the general practitioner or by the proctologist is the single most important factor in the early diagnosis of carcinoma and of premalignant polyps of the lower bowel.

The technique of ambulant proctology makes it possible to handle surgical problems in the well-equipped and well-staffed office often without hospitalization.

Indications for Hysterectomy

By Richard W. TeLinde, M.D.
Baltimore, Maryland

HYSTERECTOMY has become one of the more commonplace operations. It may be one of the simplest operative procedures and it can be one of the most difficult. One can often judge by a careful examination preoperatively the difficulties which he will encounter at the operating table, but not always. Unexpected complications are encountered at operation which, if not properly handled, may increase the morbidity and mortality. Just before the war we performed one thousand successive hysterectomies with two deaths. Both were from pulmonary embolism and probably unavoidable. Nevertheless, in general, the mortality from hysterectomy in the better hospitals is in the neighborhood of one per cent. In addition, there may be a more or less serious morbidity associated with the operation due to bladder, ureteral or bowel injuries. These complications have become more frequent in recent years due to the more universal performance of total hysterectomy. This is not to indicate that I am opposed to total hysterectomy. On the contrary, I believe the total operation is the better procedure and should be done in almost all instances. On our service last year we performed total hysterectomy in 92 per cent of the cases. I hope the incidence will never become 100 per cent for, if it should, I would be forced to the conclusion that the staff had lost its surgical judgment. Our ward service is largely composed of colored women who have large fibroids which are often complicated by salpingitis, and it is sometimes wiser to do the lesser operation because of technical difficulties in removing the cervix. When in the judgment of the operator, the danger of removing the cervix exceeds the danger of cancer occurring in the cervical stump he had better do the subtotal operation.

I have spoken of the difficulties sometimes encountered with hysterectomy not to discourage its performance when there is a sound indication, but to emphasize that it should not be undertaken unless there is a real indication.

Presented at the Annual Session of the Michigan State Medical Society, Grand Rapids, September 29, 1955.

Vaginal Hysterectomy

Within the past several years, vaginal hysterectomy has become increasingly popular with some operators. I think this is proper, for it has definite advantages over the abdominal operation. In general, the postoperative discomfort is less and recuperation is more rapid. My indications for vaginal hysterectomy are few, but they occur with sufficient frequency to make it one of our more frequent operations.

Recurrent functional bleeding of sufficient severity to require definite treatment is one of the more frequent indications. I emphasize *recurrent* bleeding because I believe curettage should always be done first to establish the diagnosis and for its possible curative effect. Under certain circumstances, a second curettage may be advisable, but if the bleeding recurs with sufficient severity to make definitive treatment advisable, vaginal removal of the uterus is the operation of choice. I believe this is true whether the vagina is nulliparous or parous and even when there is no descensus.

The same operation is indicated when one is dealing with a small bleeding fibroid. If the uterus is more than twice its normal size, I believe it is better to remove it abdominally. I am cognizant of the fact that not infrequently a large free fibroid can be removed vaginally quite safely by morcellation in expert hands, but in average hands stunt surgery had best be avoided. The presence of a low midline scar indicating previous pelvic surgery should make one very cautious in selecting vaginal hysterectomy. It is not an absolute contraindication, but one should make quite certain by careful examination under anesthesia that the uterus is freely movable before attempting its removal vaginally. As a matter of fact, it is an excellent plan when doing vaginal hysterectomy to have a table set up for laparotomy for use if difficulties are encountered vaginally requiring quick entrance of the abdomen. I have only once in my career had to make this change, but I believe in that instance it was life saving and hence worth the extra effort of preparedness.

Abdominal suspension of the retrodisplaced uterus is justly being done less and less frequently. I think that this trend is proper, but I happen to believe there is still an occasional indication for an intra-abdominal uterine suspension. Nevertheless, when a woman has really distressing symptoms from retrodisplacement with or without first degree descensus and when she has in her opinion completed her family, I believe a vaginal hysterectomy with the indicated vaginal plastic repair is far superior to an intra-uterine suspension. Relief of symptoms is assured, and further trouble from a diseased uterus is impossible.

This brings up the problem of the more marked degrees of uterine prolapse in relation to vaginal hysterectomy. It may surprise some of you to hear me say that I do not regard it as the operation of choice when there is marked descensus. It does not fall within the domain of this paper to discuss in detail the technical advantages and disadvantages of the various types of operation for prolapse and I will simply state that, after giving vaginal hysterectomy a trial in the treatment of the advanced degrees of prolapse, we found it wanting in too many instances after a long follow-up. A prolapsed vagina occurring after vaginal hysterectomy is extremely troublesome and very difficult to repair if one is to preserve a functional vagina. Our present attitude is that each case of prolapse should be regarded individually and the operation done which is best suited to the case. On the whole, the Spalding-Richardson operation has proved quite satisfactory, and we have reserved the vaginal hysterectomy for those cases of marked prolapse in which benign disease of the uterus makes its removal desirable.

Before leaving the subject of vaginal hysterectomy I should like to say a word about the removal of the grossly normal uterus for severe dysmenorrhea. I have done the operation for this indication perhaps half a dozen times in my professional career and since the uteri are normal in size I have usually done the operation vaginally. In the woman approaching forty or beyond, who has extreme menstrual pain and upon whom all conservative measures have been tried, it does not seem sensible to me to perform presacral neurectomy with perhaps a 70 per cent chance of relief when a hysterectomy can offer her certain relief. I am assuming that such a patient will have had her children without relief of her menstrual pain or that she has given up the idea of childbearing. Some of my most grateful patients fall into this group, but they are few and, if one does the operation in properly selected cases, the number should remain small.

Abdominal Hysterectomy for Benign Uterine Disease

Probably one of the greatest surgical sins of our generation is the unnecessary removal of the asymptomatic myomatous uterus. There are definite indications for removal of the fibroid uterus and one should be satisfied in his own mind that at least one of the following symptoms is present before advising hysterectomy: Excessive bleeding; discomfort or severe pain arising from the tumor; pressure of adjacent organs causing dysfunction, such as the bladder, bowel, or ureter; distortion of the abdomen, or evidence suggesting malignant change.

Myomectomy is indicated at times because of the effect of the fibroid upon past, present or future pregnancies. Since this paper deals only with the indications of hysterectomy, a discussion of myomectomy is not pertinent.

Let us consider the above indications individually. Excessive bleeding at the time of menstruating may be and often is due to fibroids, but excessive bleeding from the fibroid uterus is not necessarily due to the fibroid. Other pathologic lesions, such as endometrial hyperplasia or endometrial polyps, may be the cause and the fibroids may be incidental. After all, how frequently does one encounter even large fibroids with normal or even scanty menstruation? Hence, when menorrhagia has been present only a month or two, a curettage should be done instead of rushing into a hysterectomy. Curettage may accomplish several things. It will remove an endometrial polyp and stop the bleeding. It will remove the hyperplastic endometrium and temporarily or permanently relieve the patient. It will indicate whether the uterine cavity has become irregular due to the submucous position of the fibroid, which information may be of great value in deciding on hysterectomy in the future. By curettage, combined with cervical biopsy, a diagnosis of malignancy can be made or excluded. It is particularly important to carry out this simple diagnostic procedure when there has been intermenstrual bleeding.

Abdominal or pelvic discomfort or more severe pain is a frequent reason for operative interfer-

ence. There are many causes for pain with fibroids; the pressure of a large but uncomplicated tumor on the pelvic nerves may give rise to pain, and tumors which are the site of extensive necrosis are also sometimes painful. In rare instances, pedunculated fibroids twist and give rise to a clinical picture of acute abdominal pain much like one sees with a twisted ovarian tumor. In the author's experience, fibroids twist on their pedicle more often postmenopausally and during pregnancy. The commonest cause for pain in our public ward experience is a complicating pelvic inflammatory disease, acute or chronic. A long-standing pelvic inflammatory residue that has been asymptomatic for months or years may become painful when the growing fibroid begins to stretch the pelvic adhesions. Circulatory disturbances and edema resulting from pressure of the tumor upon chronically infected tubes sometimes results in acute or subacute painful exacerbations. Such pelvic inflammatory disease seldom responds well to palliation, and surgery is necessary sooner or later. Dysmenorrhea, acquired in the fourth or fifth decade, may be the outstanding symptom of the growth of fibroids. A common symptom complex resulting from the fibroids at this time of life is menstrual pain, coupled with increased menstrual flow. Regardless of which one of the above conditions is responsible for the pain, hysterectomy is indicated.

Evidence of pressure on near-by pelvic viscera is also an indication for treatment. The urinary bladder is the organ that suffers most often from such pressure, giving rise to frequency of urination. Although this symptom is common with large fibroids, it is remarkable how frequently one sees the pelvis filled with fibroids without any increased frequency of urination. The great ability of the bladder to function normally in spite of extreme distortion by pelvic tumors is truly remarkable. Occasionally, acute retention of urine results from a fibroid and necessitates surgical interference. We have seen this occur as the result of marked growth of the fibroid anteriorly, pressing the superior surface of the bladder against the internal sphincter region. More frequently a tumor of about the size of a three-months pregnancy incarcerated in the cul-de-sac pushes the cervix downward and forward and obstructs the flow from the urethra. We have also observed a large pedunculated submucous tumor, filling and distending the vagina, pressing on the urethra and causing retention. As stated previously, the presence of the tumor upon the ureters at the pelvic brim, with resultant kidney damage may indicate the necessity of operative treatment.

The bowel is less apt to show symptoms from pressure than the bladder, but constipation can be caused and aggravated by such pressure; more frequently one is astounded by the relatively normal function of the bowel in the presence of large fibroids that almost completely fill the pelvis. Very rarely we have seen acute intestinal obstruction occur from pressure of a large fibroid on the bowel.

Often a large fibroid uterus will give no other symptoms except abdominal distention. No woman should be required to appear as though perpetually pregnant or to have a permanently distorted figure, and I believe this constitutes a reason for hysterectomy even without other symtoms.

When a woman is told that she has a fibroid uterus and is advised that it may be safely kept under observation the natural question is, "What about malignancy?" The chance of fibroids undergoing malignant change is slight. Evans in a large series of fibroids at the Mayo Clinic found sarcomatous change in only 0.7 per cent. Actually the percentage of malignancy in fibroids is much less than that, for this percentage was based on the fibroids removed for proper indications. If the percentage of malignancy could have been based on all existing fibroids (which is obviously impossible), it would have been much smaller. Certain it is that the risk of malignant change is no greater than the risk of surgery in most instances, so the possibility of its occurrence does not constitute a legitimate reason for removal. On the other hand, when there is reason to suspect malignant change because of rapid growth, or any growth after the menopause, hysterectomy is indicated. Rarely, a benign myoma grows after the menopause, but this is so rare that it is only safe to assume that proven postmenopausal growth indicates sarcomatous change and immediate hysterectomy.

Abdominal Hysterectomy with Operation for Adnexal Disease

What are the indications for hysterectomy when surgery is done for adnexal disease? This question should be answered in three parts depending upon whether we are dealing with salpingitis, endometriosis or ovarian tumors.

It is recognized generally today that surgery is usually done for the residue of salpingitis and the resultant pelvic pain, rather than for the elimination of the infection. Even before the advent of the sulfas or antibiotics it was recognized that acute and subacute salpingitis would usually subside with rest, local heat and the passage of time. Only the local complications, such as pelvic abscess, required drainage. But rarely a thick walled tuboovarian abscess, even with thorough antibiotic treatment, persists and requires removal to eliminate the infection. Nevertheless, most surgery today is and should be done for persistent abdominal and pelvic pain due to adhesions resulting from the burned out infection. Since Neisserian tubal infection is practically always bilateral, a double salpingectomy is required, sometimes with the removal of one or both ovaries. With postabortal infection, bilaterality is not as often the rule and if surgery is required a normal tube may at times be spared. When I took over the ward service at Johns Hopkins, I was immediately struck with the number of patients who required further surgery for uterine disease upon whom bilateral salpingectomy had been done several years before. In the sterile woman, the uterus can be nothing but a liability and in recent years it is almost an invariable rule to perform hysterectomy when both tubes are removed. This probability is discussed with the patient preoperatively and, if the patient is adamant in her desire to have her uterus spared, we may yield to her desire. When the tubal disease is tuberculous, hysterectomy is still more important because the uterus frequently is involved with the tuberculous disease.

When the severity of the symptoms requires lapartomy for endometriosis, one may have the choice of conservatism with preservation of the childbearing function, radical surgery and semiradical surgery. By the last named procedure, we mean hystectomy but preservation of at least a portion of one ovary. Naturally the younger the woman and the greater her desire for pregnancy, the harder one attempts to be conservative. Our results with conservative surgery in these young women have been most gratifying. In the woman past forty with extensive involvement of both ovaries with endometriosis, hysterectomy and double adnexectomy are usually the procedures of choice. But there is a group of relatively young women with endometriosis in whom childbearing is past or impossible in whom we have been able to avoid complete castration, but in whom the removal of the uterus should be done to eliminate severe menstrual pain. Although a small percentage of these women may ultimately require radical surgery, the majority of them are kept comfortable by this semiradical procedure.

Abdominal Hysterectomy for Malignant Uterine Disease

There is no place in all surgery when a knowledge of gross pathology is more important than when dealing with ovarian neoplasms. When dealing with unilateral benign tumors in relatively young women, it is obvious that the uterus and opposite ovary should be spared. With benign unilateral tumors in the middle-aged woman approaching her menopause, it is often wiser to remove the opposite adnexa and uterus. With bilateral ovarian cancer there is, of course, no choice but to perform hysterectomy and double adnexectomy. But what of the unilateral, well encapsulated malignant ovarian tumor? Radical surgery is the back bone of the treatment of almost all ovarian malignant ovarian neoplasms. There is a temptation at times to simply remove the affected tube and ovary but the lymphatic connections between the uterus and opposite adnexa are so extensive that radical surgery should be done. Even when the opposite ovary appears normal, microscopic cancer is present in a high percentage of the cases. In fact, if a mistake has been made and a unilateral ovarian neoplasm is removed without removal of the uterus, only to find the tumor malignant on miscroscopic section we believe a second operation should be done without delay for the removal of the uterus and opposite adnexa. There is only one exception which we make to the rule of radical surgery for malignant ovarian tumors. In very young individuals one occasionally encounters a feminizing or masculinizing well encapsulated tumor. Although these tumors are malignant, they are usually of low grade malignancy and a calculated risk of conservative surgery may be taken.

The question of hysterectomy for carcinoma of the corpus uteri is not controversial. All gynecologists in the United States and Canada are agreed that total hysterectomy and bilateral salpingo-oöphorectomy should be done for endometrial cancer. All are not agreed on the advantage of preoperative irradiation. In our clinic, we believe it

is advantageous on the basis of our own experience and an unbiased review of the literature. Recurrences in the vaginal vault appear to be fewer if preoperative intracavitary irradiation is done.

The question of hysterectomy for cervical cancer is very controversial. Opinion is varied not only regarding surgery versus irradiation but there are some who believe a combination of the two should be used. I can only give you our views and attempt to give our reasons for holding them. In selecting therapy for cervical cancer today one should make as exact an estimate as possible as to the extent of the growth. Almost everyone is agreed that stages 3 and 4 of cervical cancer should be treated by irradiation. The results are poor but the only surgical attack possible is by exenteration which has a terrific mortality and still greater morbidity. At the other extreme is Stage O, the preinvasive growths. It is our custom to treat them by surgery. The operation which we do for this stage of the disease is a Modified Wertheim hysterectomy. By this we mean that we remove two or three centimeters of parametrium and a good vaginal cuff, but we do not do a pelvic lymphadenectomy. In our experiment with therapy with this stage of cervical cancer we decided on this type of operation and now have operated upon over two hundred patients within the last twelve years and all are living and well. In addition, since so many of these occur in young women we frequently save an ovary and thus prevent an early menopause. That this is a safe practice is shown by the fact that all of these patients are also well. For these reasons we have continued with this treatment of Stage O.

Most gynecologists concede that Stage 2 of the disease, in which there is extension to the upper vagina and to a slight degree to the parametrium, should be irradiated. The real controversy is concerning Stage 1, when the entire lesion is confined to the cervix. It has been our custom to treat these women with a full course of irradiation. Our five-year salvage has varied in different years from 70 to 85 per cent. Others have treated this group of patients by the radical hysterectomy, adnexectomy and pelvic lymphadenectomy. Their salvage is practically identical to ours but this major surgery is much more of an ordeal for the patient than is the application of radium, and urinary tract complications are more frequent among the surgical cases. In our clinic we reserve this operation for the Stage 1 and occasional early Stage 2 cases which do not respond to irradiation or have local recurrence in the cervix. In deciding the question of irradiation versus surgery, one should always bear in mind that most of the published results are those of expert technicians in pelvic surgery who have had long and constant experience with this operation. The average or even good pelvic surgeon who might be called upon to perform the operation only occasionally had better decide on irradiation even in what appear to be favorable Stage 1 cases.

THE AMERICAN ACADEMY OF ALLERGY

A scientific "Hawaiian Session" of the American Academy of Allergy is scheduled for February 7 to 12, 1957, as a conclusion to the Academy's annual meeting in Los Angeles, February 4 to 6, 1957. An extensive program is planned for February 15, 1957.

Physicians throughout the United States are invited by the Academy to participate in this mid-winter professional and vacation opportunity in the Paradise of the Pacific. Further information can be obtained from the Executive Office of The American Academy of Allergy, 208 E. Wisconsin Ave., Milwaukee 2, Wis.

Fractures of the Humerus

Ambulatory Traction

By Hira E. Branch, M.D.
Flint, Michigan

THE following technique was evolved to allow humeral fractures to heal with better results, at less cost to the patient, as most cases can be handled on an outpatient basis. It is based on the principle of utilizing the weight of the forearm and arm, below the fracture site, as the traction force. This is accomplished by using a wrist neck sling. Added traction force may be obtained by use of a splint forearm cast, and still more traction by adding weights to the forearm cast (Fig. 1).

Procedure

The patient is set up on a table, holding the wrist of the fractured side in supination, the elbow bent at 90 degrees, and in such a manner that the forearm and arm *drag* through the fracture site on the shoulder. It may be necessary to lean slightly toward the fracture side. Very rarely is local anesthetic in the fracture necessary. A two-inch plaster slab is now placed from the base of the neck over the shoulder down the arm to the lateral point of the elbow. This, plus a wrist neck sling, may be all that is necessary for a head or surgical neck fracture. Fractures below this level usually have a posterior plaster slab from the tip of the shoulder to the tip of the olecranon, a slab anteriorly stopping an inch proximal to the elbow crease, and a short fourth slab from the axilla to the inner point of the elbow. These slabs are held on by a gauze bandage over which is placed a snug elastic bandage. After the slabs are bandaged, a wrist neck sling is applied.

The fracture is now set by merely straightening the humerus into good alignment and holding until the plaster splints are hard. Each few days the elastic bandage should be replaced to keep the splints snug.

In fat patients, it is necessary to place a pillow under the axilla, tying it around the neck to hold it in position. The fractured arm is thus held in straight alignment and lateral bowing is prevented. Two or three inch stockinette is useful for the wrist neck sling and to hold the pillow.

Infrequently, a very large traction force is needed in severely impacted or overriding fractures



Fig. 1. Coaptation plaster splints and wrist-neck sling. The forearm cast is split and weighted.

(Figs. 2, 3 and 4). In these, a thickly padded forearm cast is applied with a loop at the palm and is immediately split for possible swelling. A neck sling is fastened to the palmar loop. If necessary, a five pound sash weight or pound weights may be added at the elbow level, but these must be removed within twelve to seventy-two hours. The forearm cast is removed in three to ten days.

Presented at the meeting of the American Medical Association, Atlantic City, New Jersey, June 7, 1955.

Distraction of the fracture and luxation of the shoulder may be the penalty should this traction force be left on too long.

Lower-Third.—Radial nerve palsy was found in 8.3 per cent of these patients, dislocation of the elbow in 16.7 per cent, and compound fractures in



Fig. 2 *(Upper left).* Severe comminuted Y-type condylar-supracondylar and shaft fracture, complicated by Colles type wrist fracture.

Fig. 3 *(Right).* Colles fracture reduced manually under local anesthesia, hold by plaster splints. A weighted forearm cast is then applied for the humeral fracture. (See Figs. 2 and 4).

Fig. 4 *(Lower left).* Humeral fracture reduced in twelve hours by weighted cast. The weights were then removed, and the forearm cast was continued for seven days.

Discussion

Two-thirds of all the 187 humeral fractures involved in this study were treated on an outpatient basis. No hospital stay was involved in 48.6 per cent of the cases. The complications associated with these fractures are illustrated in the six accompanying diagrams (Figs. 5-10).

Head Fractures.—Multiple fractures of other bones were present in 30 per cent of these cases, raising the average to 4.5 days in the hospital. (Fig. 5).

Upper Third and Surgical Necks.—In this group there were only 8.3 per cent multiple fractures of other bones, with 1.6 per cent pathologic (cancer) fractures (Fig. 5), and the average hospital stay is only 2.1 days.

Middle-Third.—Radial nerve palsy was present in 17.6 per cent and ulna nerve palsy in 3 per cent of these patients (Fig. 6). 14.7 per cent of this group had fractures of other bones, resulting in 2.2 days hospitalization.

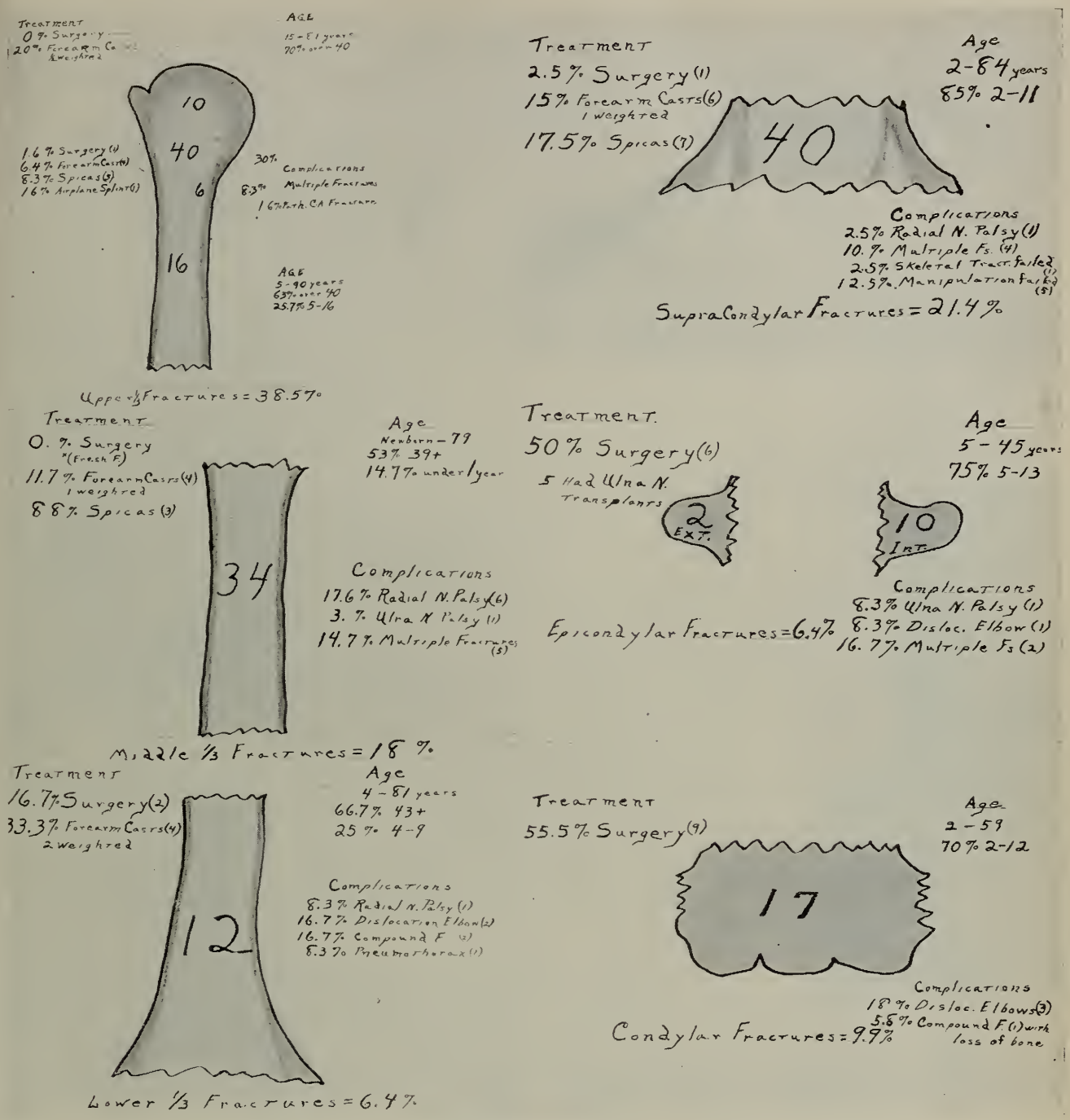
16.7 per cent (Fig. 7). Pneumothorax was present in 8.3 per cent. This group only averaged two days in the hospital.

Supracondylar.—(Fig. 8) Ten per cent of these patients had fractures of other bones, and 2.5 per cent were found to have radial nerve palsy. Skeletal traction had failed in 2.5 per cent and manipulations in 12.5 per cent of these cases. This group only averaged 1.1 days in the hospital.

Epicondylar.—Ulna nerve palsy and dislocation of the elbow occurred equally in 8.3 per cent of these patients, with 16.7 per cent having fracture of other bones. The average hospital stay was 2.6 days. (Fig. 9).

Condylar.—Dislocation of the elbow occurred in 18 per cent of these patients (Fig. 10) and compound fractures in 5.8 per cent, involving actual loss of bone. This group average 2.5 days in the hospital.

Fractures of the head and shaft of the humerus



Figs. 5 to 10.

occurred predominantly in patients over thirty-nine years of age, with supracondylar, epicondylar, and condylar fractures largely in the two to thirteen-year age group (Figs. 5-10 and 11). Patients under one year of age all suffered middle third shaft fractures.

Treatment

Head fractures occurred in ten patients (5.3 per cent) and no surgery was performed. Forearm casts, one-half of which were weighted, were placed on 20 per cent of the cases, with airplane splints on 10 per cent. Exercises of the joints began on the thirtieth day.

Sixty-two patients (33.2 per cent) suffered upper third and surgical neck fractures. Surgery was performed in 1.6 per cent, forearm casts were applied in 6.4 per cent, spica casts in 8.3 per cent, and airplane splints in 1.6 per cent. Exercises of joints and muscles began on the twenty-sixth day.

Middle third fractures involved thirty-four patients (18 per cent). Forearm casts were used in

11.7 per cent with one-fourth of them weighted, and spicas were used in 8.8 per cent. Exercises were started on the thirty-fifth day. There was no surgery of fresh fractures. There were four old fractures, all of the middle third shaft, which are outlined in the following case reports:

Case 1.—This was a non-union, unreduced two-and-a-half weeks' old fracture when the patient first came to me from Florida. There was radial nerve palsy which required from two to five months for recovery. An open reduction was done with an intramedullary nail. Five months later the patient lacked 30 per cent shoulder motion, and the fracture healed on one-half humerus.

Case 2.—This fracture had been treated elsewhere by open reduction and intramedullary nail. The patient had a frozen shoulder when first seen by me months later.

Case 3.—An osteopath had done open reduction and fixation with two wires, a plate, and screws. Radial palsy occurred which cleared in ten months. The patient lacked eight degrees shoulder rotation, and the fracture healed in ten months.

Case 4.—This was a non-union, four months' old fracture which had been operated elsewhere. There was radial nerve palsy, and open bone graft surgery was done and fixation with a Rush pin. The radial nerve was repaired, and there was recovery in six months.

Results

Of 154 patients (81.3 per cent) with fresh fractures of the humerus to the condyles, four (2.5 per cent) were treated by open reduction and twenty (12.7 per cent) were placed in forearm casts, one-fourth of which were weighted. Twenty-nine patients (15.5 per cent) had condylar or epicondylar fractures, fifteen (51.7 per cent) of whom were treated by open reduction. Four patients (3.2 per cent) had old fractures upon arrival, and all were operated.

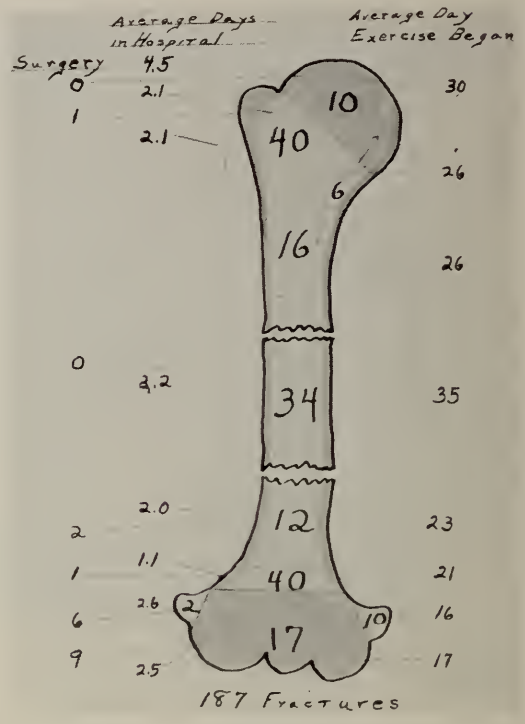


Fig. 11.

Excellent results were obtained in 119 patients (63.6 per cent), good results in thirty-four (18.2 per cent), and poor results in ten (5.3 per cent). Two patients died, and twenty-two (11.8 per cent) did not return for checkup.

Summary

The principle and procedure of ambulatory traction for fractures of the humerus have been presented, and an analysis of 187 consecutive fractures of the humerus has been made. The technique is economically sound, making it possible for two-thirds of the patients to be treated in the office.

MEDICAL JOURNAL PROFITS UNDERGOING TAX SCRUTINY

Internal Revenue Service is making no public acknowledgment of this, but its tax ruling division is looking into profits of a number of medical journals and income taxes paid thereon. Although all of the journals involved are official organs of professional societies, some are handled by book publishing firms.

Michigan Clinical Institute

Michigan physicians engaged in the general practice of medicine, and they are in the majority, are indeed fortunate. Their State Society has officially taken cognizance of their needs by creating the Michigan Clinical Institute. This refresher course held each year in March, combs the entire country in order to secure qualified and interest-holding clinical teachers so that the latest and most practical advances in medicine are made available to the family doctors of Michigan.

The MCI does locally what the AMA Interim Session does nationally. Both place their primary emphasis on speakers and subject matter that appeals to the general practitioners.

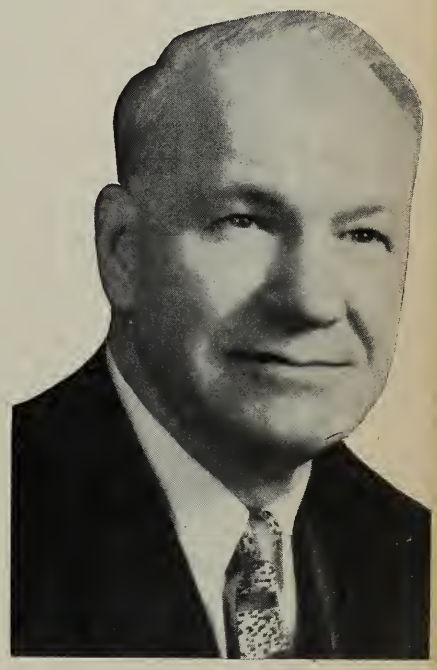
In this era of rapid and profound change in both diagnostic procedures and therapeutic armamentarium, the practicing physician, regardless of his specialty—the generalist, in particular—needs not only the efforts and resources of his own special group, but those of his State Society, as well, if he is to attain the degree of proficiency rightly demanded by the public.

It is no mere coincidence that the AMA Interim Session, the AAGP and the MCI, all had their inception in 1947. The force that created them was the ferment of discontent that for years had permeated the minds of the nation's leading generalists. Organized medicine, ever sensitive to the manifest needs of its membership and being essentially democratic, complied with these expressed desires.

Great events tend to occur in multiples, and 1947 marks the acceptance, by all segments of organized medicine, of the fundamental dignity and intrinsic worth of general practice.

The generalist should be reassured and sustained in his difficult but rewarding role of family physician by the realization that his basic position in the over-all medical picture has been fully recognized and heartily approved by both the AMA and the MSMS. In his quest for continuing postgraduate medical education, the generalist should not lose sight of his own State Society's valuable contribution, the Michigan Clinical Institute.

President's



Message

Arch Walls M-D

President, Michigan State Medical Society

Editorial

HOLIDAY GREETINGS

The Council of the Michigan State Medical Society, the Publication Committee and the Editor bespeak for our membership a most happy Christmas Season, and during the New Year opportunity and courage to accomplish the innermost ambitions for a successful and satisfying tour of duty.

THANK YOU

With this number of THE JOURNAL, we bring the year of 1956 to a close. THE JOURNAL has continued to present the best in medicine from a scientific standpoint. The papers printed have been carefully screened, and many have been definitely stimulated to express the theme the Society or its Committees have especially stressed in that particular number. As in the past ten years, certain special activities or interests have been centered in individual issues of THE JOURNAL and where feasible the covers of THE JOURNAL have been especially designed to set forth the idea. When special groups of papers have been used, the Editor has been happy to have members aid in accumulating and selecting them, stimulating them, or in numerous ways assemble the material for that particular issue. Many men have helped, but we wish to give special credit to a few who have done an outstanding service leading to the complete coverage of some particular phase of our work.

First, we mention J. G. Bielawski, M.D., of Detroit, Secretary of the Michigan Heart Association, who secured most of the papers on Heart Disease and Rheumatism in the January number, and also a group in the May number. For the material in the February number honoring the University of Michigan School of Medicine, we are indebted to Albert C. Furstenberg, M.D., Dean of the Medical School. Gordon E. Scott, Sc.D., Dean of Wayne University College of Medicine, supplied the material for the March number of THE JOURNAL which was devoted to his school. Wayne University also supplied other papers which we have used during the year. John Wellman, M.D., of Lansing, and E. T. Thieme, M.D., Ann Arbor, were of particular help in preparing the April Cancer number. Homer Smathers, M.D., of Detroit, helped with the August Trauma issue, while the September number of THE JOURNAL saluted Ingham County Medical Society for its long-continued and well-attended spring Clinics. William Hayford, M.D., Lansing, was responsible for the many papers being secured for that special number. William LeFevre, M.D., of Muskegon, was again instrumental in securing an offering of most excellent papers on the subject of Diabetes used in the October issue. Hugh W. Brenneman, Public Relations Counsellor, assembled the material making up twenty-eight reports on the several activities of the Medical Profession as Citizens for the November Number of THE JOURNAL.

To all these, we offer our sincere thanks and appreciation of many jobs very well done.

OPHTHALMOLOGIC PRACTICE

Nonmedical practitioners have attempted for several years to place legal restrictions on "eye care" which would limit doctors of medicine from prescribing or furnishing glasses to their patients. Furnishing of glasses is part of "eye care," not the practice of medicine, claim the licentiates of the optometric and optician laws.

Two or three years ago the Judicial Council of the American Medical Association with the knowledge of the leaders of the Ophthalmologic Societies and Section, promulgated the rule: "It is unethical for a physician to profit from the provision of glasses and other appliances. He shall limit the source of his professional income to medical services actually rendered by him to his patient."

At the Atlantic City Session of the American Medical Association in June, 1955, a special meeting of the section was attended by about 800 persons who strongly denounced that opinion of the Judicial Council. The House of Delegates by a decisive vote deleted Section 8 of Chapter 1, and substituted the following: "It is not unethical for physician to prescribe or supply drugs, remedies, or other appliances providing there is no exploitation of the patient."

Many of the state medical societies (including

Michigan) and ophthalmologic societies have officially recognized that "supplying and dispensing of glasses is part of the service a doctor renders his patient in complete eye care."

In October, at the Chicago meeting of the American Academy of Ophthalmology and Otolaryngology, the National Foundation for Eye Care was formed under the auspices of the Academy. The Michigan Trustees are Harold Falls, M.D., of Ann Arbor, and A. D. Reudemann, Sr., M.D., of Detroit.

A revision of the Principles of Ethics of the American Medical Association is now in process, endeavoring to shorten the document. Evidently the same super idealists who influenced the Judicial Council have been at work, for in the proposed revision we read in Section 7: "In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him to his patient."

Such a statement would include all services rendered in a doctor's office such as x-rays, examinations, laboratory, nurses' services, shots, vaccination, fittings of appliances (glasses) or dispensing of drugs. Do the proposed "principles" indicate a possible deliberate intent to undo the action of last year? These revisions will bear watching.

COMMUNITY HEALTH ASSOCIATION

About three months ago, the Attorney General of Michigan handed down an opinion that a portion of the enabling act under which Michigan Medical Service is organized "is inoperative because the clause is indistinct and not specific." Soon rumors came of a movement to establish another voluntary medical care program under the same enabling act, thus avoiding the establishment of an insurance company.

Early in October, Walter Reuther, President of UAW-CIO, called together a group "of government, business, labor, education and religious leaders" to form a Community Health Association. The purpose of the association would be "to develop a program to make it possible for individuals and families in the community to purchase comprehensive medical care of high quality through pre-payment . . . our plan calls for a different kind and more advanced health service program."

Reuther named the following persons as the founding members of the Association: Rabbi Morris Adler, of Congregation Shaarey Zadek; the Reverend Father John A. Trese, Hospital Coordinator of the Catholic Archdiocese of Detroit; the Reverend Elmer B. Usher, Director of the Department of Christian Social Relations for the Episcopal Diocese of Michigan; James A. Lewis, Vice-President of the University of Michigan in charge of Student Affairs; Wayne County circuit judge, Wade H. McCree, Jr.; Joseph H. Verhelle, Detroit banker; Emil Mazey, UAW Secretary-Treasurer; and Marion Macioce, Vice-President of the Detroit Building Trades Council. Note: not a doctor listed!

Three Detroit hospitals are reported to have agreed to take patients sent in by this Association and allow the doctors to be sent in to treat them. It is also reported that certain doctors have been approached asking them to serve whole or part time on salary. Inducement: Social Security—also hospital facilities.

Doctors and others who have watched the publicity during the past year resulting from the Blue Cross request for increased rates, and the testimony before the Governor's Commission, know that organized labor has an exact program. Reuther has said repeatedly that his ultimate ambition is to force the Congress to pass an act giving "complete health care to the people without expense to the recipient." He and his spokesmen have claimed the services given by Michigan Hospital Service and Michigan Medical Service are not as comprehensive as he wishes, that they are insufficient and too expensive. The Governor's Commission was to find a way to give more complete service at less cost.

The medical profession is still the logical source of prepaid medical care and no program except contract or corporation service can undersell it. The Governor's Commission has failed to find another way even though the Michigan State Medical Society offered every co-operation. We have priced *our* services as low as possible, in fact lower than some of our members are pleased to accept.

MICHIGAN MEDICAL SERVICE OFFERING

In the labor negotiations with Ford Motor Company over a year ago, a $6,000 income limit policy was requested. The Michigan State Medical Society Committee has finally and laboriously

produced such a contract. The cost is high as was expected, but it is available.

Michigan Medical Service has not increased its 1942 rates to consumers since March 1, 1950, when ten cents a month was added, and the $5,000 plan was offered, but has increased services to the patient.

Blue Shield has liberalized its benefits until the margin of reserve is about reached. More liberalization will demand additional premiums. The Board is prepared and hopes soon to announce riders to offer many more services such as office and outpatient diagnosis including laboratory and radiologic services; a rider offering outpatient and office surgery; a rider providing therapeutic radiologic services. This will very materially extend our program, make it more comprehensive and can be done without the necessity of waiting to sell the new $6,000 contract which is also being offered.

HAROLD J. MEIER, M.D.

Councilor 3rd District



To replace the newly elected President-Elect as Councilor from the Third District, the House of Delegates elected Harold J. Meier, M.D., of Coldwater. The doctor was born in Grand Rapids in July, 1904. His early schooling was in Grand Ledge High School and the University of Michigan, College of Literature, Science, and Arts.

He graduated from the University of Michigan School of Medicine in 1929 and interned at Columbia Hospital, Milwaukee Children's and South View Hospitals from 1929 to 1931. He was licensed to practice in 1931, starting in Burlington, Wisconsin, from 1931 to 1936, where he was associated with the Bennett Clinic. In 1936 he located in Coldwater where his practice is now limited to traumatic and industrial surgery.

His practice was interrupted for three years while he served as Surgeon of Special Troops and Medical Inspection in the Armed Forces, in World War II.

He is a Fellow of the American Medical Association and has been a delegate from Branch County to the House of Delegates for ten years. He is Past President of the Branch County Medical Society, a member of the Public Relations Committee of the Michigan State Medical Society since its inception, and other state society committees. He is a member of the American Fracture Association, Association of Military Surgeons, Industrial Medical Association, and Alpha Omega Alpha, Medical Fraternity.

He is a member of the surgical staff at Community Hospital in Coldwater and a consultant in surgery to the New Hospital, State Home and Training School in Coldwater.

His wife is deceased; he has two married daughters.

C. ALLEN PAYNE, M.D.

Councilor 5th District



Dr. Payne was born in Laurium, Michigan, in 1909, received his B.S. degree at Hahnemann College of Science in Philadelphia, his M.D. from Hahnemann Medical College in Philadelphia in 1933, and his M.S. in Pathology at Wayne University in Detroit in 1938. In this same year he was certified in Clinical Pathology and Pathologic Anatomy.

He was senior resident pathologist at Methodist Hospital, Indianapolis, Indiana, from 1934 to 1936, and at Henry Ford Hospital in Detroit from 1936 to 1938. Since 1938 he has been pathologist and Director of Laboratories at Blodgett Memorial Hospital in Grand Rapids.

He served as a lieutenant-colonel in the Medical Corps, as Chief of Laboratory Services of the 17th General Hospital in the United States, North Africa and Italy from 1942 to January, 1946.

From 1950 to 1951, he was a Consultant in Pathology to Percy Jones General Hospital in Battle Creek, and is at present Consultant in Pathology to United Memorial Hospital in Greenville, Sunshine Sanatorium in Grand Rapids, and Mary Free Bed Hospital in Grand Rapids. He is Director of Laboratories and Pathologist at Ferguson Hospital in Grand Rapids.

He is a member of Kent County Medical Society, having served as its president in 1955;

member of Michigan State Medical Society, being on numerous committees and serving as Chairman of the Public Relations Committee from 1950 to 1956; Chairman of Michigan Cancer Co-ordinating Committee from 1954-1956; member of Michigan Pathological Society, having served as secretary-treasurer from 1951 to 1953, and as president in 1955; Founding Fellow of College of American Pathologists; Fellow, American College of Physicians; Fellow, American Society of Clinical Pathologists; member American Medical Association; Chairman, Board of Directors, Executive Committee and Medical Vice-Chairman of Michigan Division of American Cancer Society; Rotarian; Member of Executive Committee of Michigan Association of Blood Banks; and Member of Council of the Michigan State Medical Society.

MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION

A new approach to the work of the Michigan Foundation for Medical and Health Education has just been demonstrated. The officers and trustees of the Foundation have received a check for $5,000 to be used as a loan fund to medical students from Barry County, under the terms of the student revolving fund agreement plan administered by the Foundation.

All concerned are most appreciative of the generosity which prompted the check and believe knowledge of this action may stimulate other societies to take similar action. Besides being a worthy cause, this makes another useful outlet for gift funds, and uses the internal revenue provisions to make our gifts much more substantial. If some interested members of other societies would take the lead, it is surprising what could be done. The Foundation is receptive.

Hormonal therapy is largely applied to carcinoma of the breast and prostate as primary treatment.

* * *

Radiation of multiple myeloma is usually hopeless as far as cure is concerned.

* * *

The value of radiation therapy in the rare angiosarcomas and liposarcomas has not been established.

* * *

Environmental cancer studies must be specifically planned and carried out by personnel interested in and trained for such investigations.

* * *

The goal of cancer research, as in all other human diseases, is prevention.

ROUTINE POSTOPERATIVE LETTER

(Continued from Page 1478)

indiscretion on the side keeping a diary—sooner or later the husband runs across it.

Sending or giving a postoperative letter to a patient should be along the same line of thinking which led to the policy of labeling prescriptions as to contents at the University Hospital, Ann Arbor, Michigan. In the past, physicians have frequently told the patient what they were prescribing and why, but they did not put it in writing.

If we are practicing good medicine, our therapy should stand the scrutiny of anyone, and if we are practicing good surgery our procedures and the report of the pathologist should likewise stand the scrutiny of anyone. Our terms are not familiar to patients and not easily remembered by them. Therefore, putting our remarks in writing should help.

Whether or not the "Postoperative Letter to the Patient" is unique or is in common usage, I do not know. It should help counteract any doubts in a patient's mind about needless surgery, ghost surgeons, et cetera, and should offset stories appearing in newspapers, journals, magazines and digests, because the patients have proof in their letter that their surgery was necessary. It should be good public relations. It might even be a substitute for showing their surgical scar. I know it has been carried as far west as California and as far east as New York.

The preparation of the letter can be done entirely by an office assistant. All the information is in the patient's record. All the surgeon needs to do is put brackets, in pencil, around the parts of the report from the pathologist which he wishes included in the letter. Later he can read and sign the letter before it is mailed.

How many keep their letters, how many file them in the waste basket, how many lose them? This might make an interesting study.

To date I know of no untoward effects from these letters and so far none have led to malpractice suits.

Summary

Don't just tell the patient what operative procedures were performed at the time of his operation and what the pathologist said; put it in writing.

Twenty years hence all patients will keep a fairly complete and fairly accurate medical history on themselves with the help of their physicians.

Michigan's Department of Health

Albert E. Heustis, M.D., Commissioner

ISSUES IN PUBLIC HEALTH IN MICHIGAN

Some of the major issues in public health in Michigan today are presented on this page and will be continued on the Michigan Department of Health page in next month's JOURNAL. These issues will be reflected in budget requests that will be made to the legislature by the Michigan Department of Health for the fiscal year 1957-58.

STATE GRANTS TO LOCAL HEALTH DEPARTMENTS

In spite of the fact that more and more services have been required from local health departments by the state, the state subsidy has barely kept up with the decrease in value of the dollar.

New local activities resulting from recent legislation include licensing and inspection of trailer parks, licensing of septic tank cleaners, control of garbage feeding, reporting of narcotic addicts, hearing screening and administration of vaccines.

Moreover, through administrative action, local health departments now assist in licensing and certifying hospitals, licensing nursing homes and homes for the aged, and inspecting and approving resorts. They co-operate with the Department of Social Welfare, the State Board of Alcoholism, the Child and Adult Guidance Centers and assist the Department of Public Instruction with school lunch evaluation and reviewing school plans.

Basic community health needs are themselves increasing in complexity. There are more babies, more school children in more schools, more older people with problems of home or institution care and increased sanitation difficulties in the wake of swift suburbanization.

Current state aid for local health departments stands at $400,000. It is recommended that $600,000 be considered the minimum consistent with the increased demands being made upon local communities.

LICENSURE OF NURSING HOMES AND HOMES FOR THE AGED

Michigan has, at the present time, 466 nursing homes with 10,987 beds, 105 homes for the aged with 1,678 beds and thirty-five county medical care facilities with 3,296 beds.

Under the 1956 law, transferring the licensing of nursing homes and homes for the aged from the State Welfare Department to the State Health Department, the State Health Commissioner is required to license nursing homes and homes for the aged; to provide for hearings; to establish administrative procedures; to make such inspections as are necessary to carry out the requirements of the act and the rules and regulations authorized under the act and to provide material for guidance of nursing homes and homes for the aged in complying with the act and the rules and regulations.

Under a 1954 law, the State Health Commissioner is required to inspect and approve county medical care facilities.

To carry out the duties prescribed by the two laws, funds will be requested by the Michigan Department of Health from the 1957 Legislature to provide for the employment of three nurse consultants, a dietitian, an engineer and a typist. These staff members will work with and through local health departments in carrying out the inspecting, licensing and other services defined by law for the institutions now operating and for the many others which will be opening within the year.

POST-SANATORIUM HOME CARE FOR TUBERCULOSIS

High in priority among the changing needs in the tuberculosis control program is that of continuing and expanding supervised post-sanatorium home care to prevent relapse.

In the past, as many as three of every ten tuberculosis patients discharged from the hospital later returned, their disease again active. Most patients now leaving Michigan's twenty-one public-supported sanatoriums continue treatment with the newer medications at home. As a rule, twelve to eighteen months of carefully supervised treatment is recommended following discharge from the hospital.

The local health department is the community agency best suited to give this supervision. It is recommended that state assistance in financing approved post-sanatorium home care be given to the local health departments, based on the estimated costs of the service. The subsidy for state-at-large and county charge patients would be in approximately the same ratio as that paid by the state for the hospital care of tuberculosis patients.

Home care subsidy also may make return to home possible for some patients who would otherwise spend the rest of their lives in the sanatorium. These patients have tuberculosis in chronic form and cannot expect to control their disease completely. In many cases, supervised treatment holds the disease sufficiently in check so that the patient is not a public health hazard. Under the proposed supervised home care program it is likely that a number of chronically ill patients can safely rejoin their families.

Human anatomy continues to be the biggest obstacle to the cure of cancer of the esophagus.

* * *

In early cancer of the prostate, there are absolutely no cystoscopic changes.

* * *

The opinion of a layman, as to whether he has cancer, or whether he has been cured, is entitled to little, if any, weight.

* * *

Ovariectomy effects regression of approximately 20 per cent of mammary cancers.

Michigan Clinical Institute

Sheraton-Cadillac Hotel, Detroit

Wednesday-Thursday-Friday, March 13-14-15, 1957

Otto O. Beck, M.D., Birmingham, *Chairman*

Information

- **HEADQUARTERS**—Sheraton-Cadillac Hotel; Assemblies and Exhibits on Fourth Floor; Press Room on Fifth Floor.

- **REGISTER**—Top of stairs—Fifth Floor—as soon as you arrive.

 Hours: Tuesday, March12—1:00 p.m. to 5:00 p.m.
 Wednesday, March 13—7:30 a.m. to 5:15 p.m.
 Thursday, March 14—8:15 a.m. to 5:15 p.m.
 Friday, March 15—8:15 a.m. to 3:30 p.m.

- **NO REGISTRATION FEE** for Members of MSMS and other State Medical Associations, AMA, and Canadian Medical Association.

- **ADMISSION BY BADGE ONLY** to all Assemblies and the Exhibition. Please present your MSMS or other State Medical Association, AMA, or CMA Membership Card to expedite registration.

- **GUESTS**—Members of any state medical association, AMA, or CMA members from any province of Canada and physicians of the Army, Navy, and U. S. Public Health Service are invited to attend as guests. No registration fee. Please present credentials at the Registration Desk.

 Bona fide doctors of medicine who are associate or probationary members of Michigan county medical societies or who are serving as residents or interns, if vouched for by the president or secretary of the county medical society in whose jurisdiction they practice, will be registered as guests, with no registration fee. Please present credentials at the Registration Desk.

- **MICHIGAN DOCTORS OF MEDICINE**, in practice but who are not members of MSMS, if listed in the American Medical Association Directory, may register as guests upon payment of $25.00. This amount will be credited to them toward dues in the Michigan State Medical Society FOR 1957 ONLY, provided they subsequently are voted into membership by the county medical society in whose jurisdiction they practice.

- **DOCTOR**, register Tuesday, to save your time! Registration of physicians will be held Tuesday afternoon from 1:00 to 5:00 p.m.—as well as on Wednesday-Thursday-Friday, during the 1957 Michigan Clinical Institute. The Tuesday afternoon registration hours are arranged so that physicians may avoid waiting in line Wednesday morning before the opening Assembly.

 We recommend to Detroit physicians—and those who arrive in Detroit on Tuesday—that they register Tuesday, March 12, from 1:00 to 5:00 p.m., Fifth Floor, Sheraton-Cadillac Hotel.

- **TELEPHONE SERVICE**—Local and long distance telephone service will be available in the Sheraton-Cadillac Hotel, fourth floor. In case of emergency, physicians will be paged from the meetings by an announcement on the screen. Call the Sheraton-Cadillac Hotel, Detroit, WOodward 1-8000, and ask for the Michigan Clinical Institute extensions on the fourth floor.

- **CHECKROOM** is available in the Sheraton-Cadillac Hotel, fourth floor, next to Grand Ballroom.

- **GUEST ESSAYISTS** are very respectfully requested not to change time of their lecture with another speaker without the approval of the Committee on Arrangements. This request is made in order to avoid confusion and disappointment on the part of members of the audience.

- **PAPERS WILL BEGIN AND END ON TIME**—Nothing makes a scientific meeting more attractive than by-the-clock promptness and regularity; therefore, all meetings and panels will open on time, all speakers will be required to begin their talks exactly on time and to close exactly on time, in accordance with the schedule in the Program. All who attend the Institute, are respectfully requested to assist in attaining this end by noting the schedule carefully and by being in attendance accordingly, in order not to miss that portion of the program of greatest interest.

- **TECHNICAL EXHIBITS**—Seventy-four (74) interesting and instrucitve displays—will open daily at 8:15 a.m. and close at 5:15 p.m., except on Friday when the exhibit breaks up at 3:30 p.m. Frequent intermissions to view the exhibits have been arranged daily before, during and after the assemblies.

- **THE SCIENTIFIC EXHIBIT** will be located in the Reception Room, adjoining the Grand Ballroom, fourth floor, Sheraton-Cadillac Hotel.

- **THERE IS SOMETHING** of interest or education in the large exhibit of technical displays. SAVE AN ORDER FOR THE EXHIBITOR AT THE MICHIGAN CLINICAL INSTITUTE.

- **POSTGRADUATE CREDITS** are given to every MSMS member who attends the Michigan Clinical Institute. Notify J. M. Sheldon, M.D., Chairman, MSMS Committee on Postgraduate Medical Education, 1313 E. Ann St., Ann Arbor, Michigan.

- **PARKING**—Do not park on Detroit's streets. Inside parking at a convenient distance from the Sheraton-Cadillac Hotel is available at the Book Tower Garage, 333 State, the DAC Garage, 1754 Randolph, and the Grand Circus Garage, 1776 Randolph.

- **INFORMATION OF PRACTICAL VALUE IN DAILY PRACTICE** will be found at the Michigan Clinical Institute. All subjects on the Institute Program are applicable to clinical medicine. They stress diagnosis and treatment, usable in everyday practice.

MUCH THAT IS NEW AND INTERESTING WILL BE FOUND IN THE MCI EXHIBIT

• **PRESS RELATIONS COMMITTEE** for the 1957 Michigan Clinical Institute: A. B. Gwinn, M.D., Hastings, Chairman; H. F. Dibble, M.D., Detroit; L. R. Leader, M.D., Detroit; J. J. Lightbody, M.D., Detroit; Ralph W. Shook, M.D., Kalamazoo, and C. L. Weston, M.D., Owosso.

• **COMMITTEE ON COLOR TELEVISION:** Dan W. Myers, M.D., Detroit, Chairman, E. S. Hoffman, M.D., Detroit, F. B. Levagood, M.D., Detroit and E. B. Miller, M.D., Detroit.

• **OTTO O. BECK, M.D.,** Birmingham, is General Chairman of Arrangements for the 1957 Michigan Clinical Institute.

• **G. B. SALTONSTALL, M.D.,** Charlevoix, is Chairman of Committee on Arrangements for Testimonial Luncheon Honoring Presidents of National Medical Organizations on Thursday, March 14.

• **WM. M. LeFEVRE, M.D.,** Muskegon, is Chairman of the Program Committee for the 1957 Michigan Clinical Institute.

THE "BLOCK SYSTEM"

at the

1957 MICHIGAN CLINICAL INSTITUTE

Surgery and Cancer Control—Wednesday morning, March 13

Trauma—Wednesday afternoon, March 13

Heart and Rheumatic Fever—Thursday morning, March 14

Internal Medicine—Thursday afternoon, March 14

Obstetrics, Gynecology and Pediatrics—Friday morning, March 15

General Medicine—Friday afternoon, March 15

• **MEETINGS OF SPECIAL SOCIETIES, ALUMNI AND AUXILIARY GROUPS**

Tuesday, March 12, 1957

1. **Michigan Branch, American Academy of Pediatrics** will hold a Clinical Conference beginning at 2:00 p.m. at the Children's Hospital, Detroit. Reception and dinner beginning at 5:30 p.m. in the English Room of the Sheraton-Cadillac Hotel. The dinner will be followed by a meeting and speaker.

2. **Michigan Chapter, American College of Surgeons:** Annual Meeting will be held at St. Joseph Mercy Hospital, Ann Arbor. Registration: 9:00-10:00 a.m.; scientific program at 10:00 a.m.; luncheon at 12:00 noon; afternoon scientific program begins at 1:30 p.m.; cocktails and dinner begin at 5:00 p.m.

Wednesday, March 13, 1957

3. **Cancer Luncheon** honoring L. Henry Garland, M.D., San Francisco, California, and Charles B. Huggins, M.D., Chicago, Illinois, English Room, Sheraton-Cadillac Hotel.
4. **Michigan Regional Committee on Trauma, American College of Surgeons,** will hold a luncheon-meeting in the Sheraton Room, Sheraton-Cadillac Hotel.

Thursday, March 14, 1957

5. **Testimonial Luncheon** honoring Presidents of National Medical Organizations: J. S. DeTar, M.D., Milan; Cameron Haight, M.D., Ann Arbor; Wilbert G. Malcolm, Ph.D., Pearl River, New York; Rupert C. L. Markoe, M.D., Detroit; N. F. Miller, M.D., Ann Arbor; R. L. Novy, M.D., Detroit; Charles G. Johnston, M.D., Detroit; and Wm. Robinson, M.D., Ann Arbor, in the English Room of the Sheraton-Cadillac Hotel.

6. **Michigan Heart Association:** Annual Meeting. Howard B. Sprague, M.D., Boston, Massachusetts, internationally known cardiologist and a Past President of the American Heart Association, will moderate a panel on "The Heart Patient at Work" during the Michigan Clinical Institute on Thursday morning, March 14, 1957. Dr. Sprague will appear as a guest of the Michigan Heart Association during the Heart Block portion of the MCI. Other members appearing on the panel are: Earle A. Irvin, M.D., Dearborn; Myrton S. Chambers, M.D., Flint; Gordon B. Myers, M.D., Detroit; Marion W. Jocz, M.D., Detroit; and John G. Bielawski, M.D., Detroit.

 Dr. Sprague will also be the featured guest speaker at the Annual Meeting (dinner) of the Michigan Heart Association on Thursday evening, March 14, Grand Ballroom. The dinner-meeting is a slight departure from the usual Annual Meeting format and everyone is cordially invited to attend whether or not he is a member of the Heart Association.

7. **The annual Hickey Memorial Lecture** will be given by John Caffey, M.D., Professor of Radiology, Columbia University Medical School, New York. It will be held on Thursday, March 14, 1957, 8:30 p.m. at the Wayne State University College of Medicine Auditorium, 645 Mullet St., Detroit.

 This lecture is given under the auspices of the Detroit Roentgen Ray and Radium Society, the Wayne County Medical Society, and the Wayne State University College of Medicine.

 Dr. Caffey's subject will be "The Skeleton in Cooley's Anemia."

8. **The Michigan Proctologic Society** will hold a meeting (details to be announced).

Friday, March 15, 1957

9. **A testimonial luncheon** honoring the pharmaceutical lecturer (to be selected), sponsored by the Michigan State Pharmaceutical Association, will be held in the Pan American Room, Sheraton-Cadillac Hotel.

10. **A Conference for Residents, Interns and Senior Medical Students** is scheduled for the English Room of the Sheraton-Cadillac Hotel, beginning at 2:30 p.m.

• **ACKNOWLEDGMENTS**—The Michigan Clinical Institute gratefully acknowledges the co-operation of

1. The Michigan Regional Committee on Trauma, American College of Surgeons, sponsor of the trauma program (three speakers) on Wednesday, March 13.

2. The Michigan Heart Association, sponsor of the heart and rheumatic fever program (seven speakers) on Thursday, March 14.
3. The Michigan Foundation for Medical and Health Education, Inc., sponsor of Charles B. Huggins, M.D., Chicago, the Foundation Lecturer.
4. The Michigan Cancer Coordinating Committee, sponsor of L. Henry Garland, M.D., San Francisco, California, the MCCC Lecturer.
5. Davis & Geck, Inc., Danbury, Conn., for sponsorship of the color motion pictures shown during the MCI in the Normandie Room, Sheraton-Cadillac Hotel.
6. Smith Kline and French Laboratories, Philadelphia, for sponsorship of the color television program beamed to the MCI meeting room; and Detroit's Grace Hospital and its medical staff for cooperation in arranging and producing the 3-days' TV scientific presentations.
7. The Michigan State Pharmaceutical Association for sponsoring the testimonial luncheon honoring the Pharmaceutical Lecturer.
8. Michigan Medical Service, for contributing notepads for use of MCI registrants.
9. Mead Johnson and Co. of Evansville, Indiana, and the Michigan State Medical Society—co-sponsors of the Conference for Residents, Interns and Senior Medical Students.

COMMITTEE ON ARRANGEMENTS

Otto O. Beck, M.D., Birmingham, *General Chairman*
Arch Walls, M.D., Detroit, *President, Michigan State Medical Society*
W. S. Jones, M.D., Menominee, *Immediate Past President, Michigan State Medical Society*
L. Fernald Foster, M.D., Bay City, *Secretary*
Representing Michigan State Medical Society

* * *

J. M. Sheldon M.D., Ann Arbor
A. C. Furstenberg, M.D., Ann Arbor
H. F. Falls, M.D., Ann Arbor
R. M. Nesbit, M.D., Ann Arbor
Representing University of Michigan School of Medicine and University of Michigan Department of Postgraduate Medicine

* * *

J. G. Bielawski, M.D., Detroit
H. M. Fuller, M.D., Detroit
P. C. Gittins, M.D., Detroit
N. M. Taylor, M.D., Detroit
Representing Wayne County Medical Society and Wayne University College of Medicine

* * *

P. H. Engle, M.D., Olivet
J. H. Fyvie, M.D., Manistique
D. W. Thorup, M.D., Benton Harbor
J. M. Wood, M.D., Mt. Pleasant
J. F. Beer, M.D., St. Clair
M. M. Hansen, M.D., Greenville
F. J. Busch, M.D., Saginaw
J. W. Logie, M.D., Grand Rapids
R. L. Thirlby, Jr., M.D., Traverse City
Representing Out-State Practitioners, Members of the Michigan State Medical Society

* * *

A. E. Heustis, M.D., Lansing
J. D. Monroe, M.D., Pontiac
Representing Michigan Department of Health and Michigan Health Officers Association

* * *

E. I. Carr, M.D., Lansing
Representing Michigan Foundation for Medical and Health Education

S. E. Chapin, M.D., Dearborn
Representing Michigan Heart Association

* * *

V. C. Abbott, M.D., Pontiac
Representing American College of Surgeons Regional Committee on Trauma

* * *

C. Allen Payne, M.D., Grand Rapids
Representing Michigan Cancer Coordinating Committee

COMMITTEE ON PROGRAM

Wm. M. LeFevre, M.D., Muskegon, *Chairman*
Wm. S. Reveno, M.D., Detroit, *Vice Chairman*
C. E. Badgley, M.D., Ann Arbor
B. E. Brush, M.D., Detroit
J. S. DeTar, M.D., Milan
Paul de Kruif, Ph.D., Holland

COMMITTEE ON COLOR TELEVISION

D. W. Myers, M.D., Detroit, *Chairman*
E. S. Hoffman, M.D., Detroit
F. B. Levagood, M.D., Detroit
E. B. Miller, M.D., Detroit

HOTEL RESERVATIONS

MICHIGAN CLINICAL INSTITUTE

Detroit, March 13-14-15, 1957

The reservation blank below is for your convenience in making your hotel reservation in Detroit. Please send your application to Mrs. B. Van De Keere, Assistant Sales Manager, Sheraton-Cadillac Hotel, Detroit 31, Michigan. Mailing your application now will be of material assistance in securing hotel accommodations.

As very few singles are available, registrants are requested to co-operate with the Committee on Hotels by sharing a room with another registrant, when convenient.

Committee on Hotels
Michigan Clinical Institute
c/o Sheraton-Cadillac Hotel
Detroit 31, Michigan

Attention: Mrs. B. Van De Keere, Assistant Sales Manager

Please make hotel reservation(s) as indicated below:

.....Single Room(s)

.....Double Room(s) for.....persons

.....Twin-Bedded Room(s) for.....persons

Arriving March hour.....A.M.....P.M.....

Leaving March hour.....A.M.....P.M.....

Hotel of First Choice:

Second Choice:

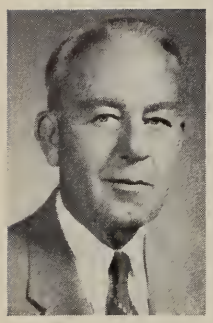
Names and addresses of all applicants including person making reservation:

Name	Address	City	State
.....			
.....			
.....			
.....			
.....			

Date Signature

Address City

Michigan Clinical Institute
1957



Otto O. Beck, M.D.

Otto O. Beck, M.D., Birmingham, General Chairman of Arrangements for the 1957 Michigan Clinical Institute, Detroit. Doctor Beck is Past President of the Michigan State Medical Society.

Program

WEDNESDAY, MARCH 13, 1957

A.M.

7:30 REGISTRATION—Top of Stairs, Fifth Floor, Sheraton-Cadillac Hotel

8:15 EXHIBITS OPEN—Fourth Floor, Sheraton-Cadillac Hotel



J. H. Garlock, M.D.

FIRST ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel
Chairman: Otto O. Beck, M.D., Birmingham
Secretary: James B. Blodgett, M.D., Detroit

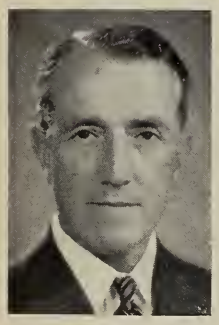
8:20 WELCOME
Arch Walls, M.D., Detroit
President, Michigan State Medical Society
L. R. Leader, M.D., Detroit
President, Wayne County Medical Society

SURGERY—CANCER CONTROL

8:30 "Present-day Approach to the Surgical Therapy of Non-specific Ulcerative Colitis"
John H. Garlock, M.D., New York, New York
Director of Surgery, Mt. Sinai Hospital; Clinical Professor of Surgery, Columbia University

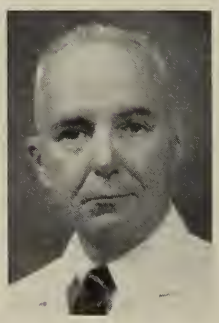
9:00 Speaker to be announced

9:30 THE MICHIGAN CANCER CO-ORDINATING COMMITTEE LECTURE
"The Pursuit of the Unorthodox"
L. Henry Garland, M.D., San Francisco, California
Clinical Professor of Radiology, Stanford University Medical School; Visiting Radiologist in charge of Stanford Service, San Francisco Hospital; Chairman, Committee on Cancer Diagnosis and Therapy, National Research Council; Past President, Radiological Society of North America; Consultant Radiologist, Veterans Administration, U. S. Army



L. Henry Garland, M.D.

10:00 THE MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION LECTURE
"Control of Human Cancers by Endocrinologic Methods"
Charles B. Huggins, M.D., Chicago, Illinois
Director, The Ben May Laboratory for Cancer Research, University of Chicago



Charles B. Huggins, M.D.

10:30 End of First Assembly

10:30 INTERMISSION TO VIEW EXHIBITS

11:15 to 12:45 **COLOR TELEVISION PROGRAM,** beamed to the Grand Ballroom, Sheraton-Cadillac Hotel through the co-operation of the staff of The Grace Hospital, Detroit and Smith, Kine and French Laboratories of Philadelphia.

OPERATIVE CLINICS

A. Operating Rooms of Grace Hospital

Under supervision of ELMER B. MILLER, M.D., Detroit, Associate Attending Surgeon at Grace Hospital and Instructor in Surgery, Wayne State University

1. **"Cholecystectomy and Bile Duct Exploration"**
 NICHOLAS GIMBEL, M.D., Detroit, Associate Professor of Surgery, Wayne State University, College of Medicine
2. **"Gastric Resection"**
 WILLIAM S. CARPENTER, M.D., Detroit, Harper and Mt. Carmel Hospitals and Instructor in Surgery at Wayne State University

B. Grand Ballroom, Sheraton-Cadillac Hotel

1. **Surgical Commentator and Moderator**
 MARION S. DEWEESE, M.D., Ann Arbor, Associate Professor of Surgery, University of Michigan; Chief of Surgical Services, Ann Arbor Veterans Administration Hospital.
2. **Panel of Discussants**
 CHARLES G. JOHNSTON, M.D., Detroit
 Professor of Surgery, Wayne State University College of Medicine
 RUSSELL L. MUSTARD, M.D., Battle Creek
 Chief of Surgery, Leila Post Montgomery Hospital; Consultant to Percy Jones Hospital and Lecturer in Surgery, University of Michigan
 JAMES W. LOGIE, M.D., Grand Rapids
 Consultant to St. Mary's and Blodgett Hospitals; President, Michigan Chapter, American College of Surgeons

12:45 **End of Television Program**



ELMER B. MILLER, M.D.



NICHOLAS GIMBEL, M.D.



WILLIAM S. CARPENTER, M.D.



M. S. DEWEESE, M.D.



CHARLES G. JOHNSTON, M.D.



RUSSELL L. MUSTARD, M.D.



J. W. LOGIE, M.D.



RALPH C. MOORE, M.D.



CHARLES L. MARSH, M.D.

SECOND ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: DONALD F. KUDNER, M.D., Jackson
Secretary: EMIL J. LAURETTI, M.D., Muskegon

TRAUMA

P.M.

2:00 **"Whip Lash Injuries"**

FRANK H. MAYFIELD, M.D., Cincinnati, Ohio
Chairman, Department of Neurosurgery: The Christ Hospital, and Good Samaritan Hospital, Cincinnati; Member, Board of Directors, University of Cincinnati; Member, American Board of Neurological Surgery; Councilor, Ohio State Medical Association; Vice Chairman, Section on Nervous and Mental Diseases, American Medical Association; Chairman, Subcommittee on Crash Injury Prevention, Committee on Trauma, American College of Surgeons

2:30 **"The Medical Aspects of Highway Accidents"**

RALPH C. MOORE, M.D., Omaha, Nebraska
Associate Radiologist, Nebraska Methodist Hospital; Professor of Radiology, University of Nebraska College of Medicine

CHARLES L. MARSH, M.D., Valley, Nebraska
Physician and Surgeon

3:00 **INTERMISSION TO VIEW EXHIBITS**



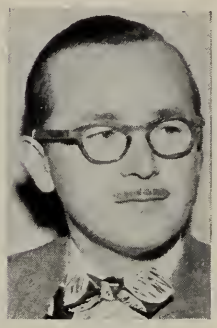
F. A. Coller, M.D.



Donald E. Cassels, M.D.



Howard B. Sprague, M.D.



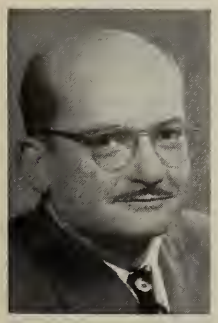
John G. Bielawski, M.D.



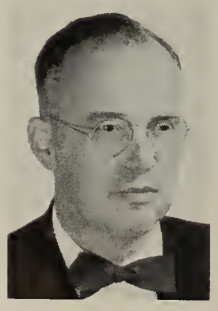
Myrton S. Chambers, M.D.



Earle A. Irvin, M.D.



Marion W. Jocz, M.D.



Gordon B. Myers, M.D.

4:00 SURGERY PANEL

Moderator: Frederick A. Coller, M.D., Ann Arbor
Professor of Surgery and Chairman of the Department of Surgery, University of Michigan Medical School

Participants:
L. Henry Garland, M.D., San Francisco, California
John H. Garlock, M.D., New York City
Charles B. Huggins, M.D., Chicago, Illinois
Charles L. Marsh, M.D., Valley, Nebraska
Frank H. Mayfield, M.D., Cincinnati, Ohio
Ralph C. Moore, M.D., Omaha, Nebraska

5:00 End of Second Assembly

No Michigan Clinical Institute Meeting Wednesday Evening

THURSDAY, MARCH 14, 1957

A.M.
8:15 REGISTRATION—Top of Stairs, Fifth Floor
EXHIBITS OPEN—Fourth Floor

THIRD ASSEMBLY
EIGHTH ANNUAL MICHIGAN HEART DAY

Sponsored by Michigan Heart Association

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: E. A. Irvin, M.D., Dearborn
Secretary: Robert E. Fisher, M.D., Battle Creek

HEART AND RHEUMATIC FEVER

8:30 "Rheumatic Fever"

Donald E. Cassels, M.D., Chicago, Illinois
Professor, Department of Pediatrics, University of Chicago Medical School

9:00 Panel on "The Heart Patient at Work"

Moderator: Howard B. Sprague, M.D., Brookline, Massachusetts

Lecturer on Medicine, Harvard Medical School; Member of Board of Consultation, Massachusetts General Hospital; Past President, American Heart Association

Participants:

John G. Bielawski, M.D., Detroit
Medical Director, Michigan Heart Association

Myrton S. Chambers, M.D., Flint
President-Elect, Michigan Heart Association; Cardiologist at McLaren General Hospital; Board of Directors, American Heart Association

Earle A. Irvin, M.D., Detroit
President, Michigan Heart Association; Medical Director, Ford Motor Company

Marion W. Jocz, M.D., Detroit
Medical Director, Chrysler Corporation

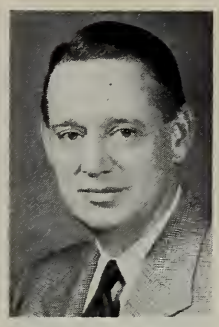
Gordon B. Myers, M.D., Detroit
Professor of Medicine, Wayne State University College of Medicine

10:30 INTERMISSION TO VIEW EXHIBITS

11:15 to 12:45 COLOR TELEVISION PROGRAM, beamed to the Grand Ballroom, Sheraton-Cadillac Hotel through the co-operation of the staff of The Grace Hospital, Detroit and Smith, Kline and French Laboratories of Philadelphia.

11:15 "Management of Hypertension"

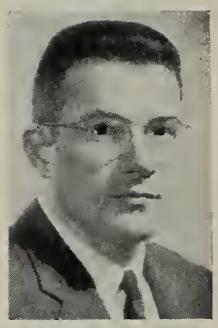
FLOYD B. LEVAGOOD, M.D., Detroit
Associate Attending Physician, Grace Hospital; Instructor in Medicine, Wayne State University



F. B. LEVAGOOD, M.D.

11:45 Clinic on "Endocrine Diseases"

WILLIAM O. MADDOCK, M.D., Detroit
Associate Professor of Medicine, Wayne State University College of Medicine



WILLIAM O. MADDOCK, M.D.

12:15 Clinic on "Collagen Diseases"

ALFRED JAY BOLLET, M.D., Detroit
Assistant Professor of Medicine, Wayne State University College of Medicine

12:45 End of Television Program

FOURTH ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel

Chairman: MUIR CLAPPER, M.D., Detroit
Secretary: WM. M. LEFEVRE, M.D., Muskegon

INTERNAL MEDICINE

P.M.

2:00 "Some Problems of Gerontology"

WM. B. KOUNTZ, M.D., St. Louis, Missouri
Assistant Professor of Clinical Medicine, Washington University School of Medicine and Director of Clinical Research, Division of Gerontology



WILLIAM B. KOUNTZ, M.D.

2:30 "Sudden Unexpected Death"

JULIUS BAUER, M.D., Los Angeles, California
Clinical Professor of Medicine, College of Medical Evangelists, Los Angeles; Senior Attending Physician, Los Angeles County General Hospital; Consultant, VA Hospital, Long Beach, California



JULIUS BAUER, M.D.

3:00 INTERMISSION TO VIEW EXHIBITS

4:00 "Black and Blue Spots"

WILLIAM DAMESHEK, M.D., Boston, Massachusetts
Senior Physician and Hematologist-in-Chief, New England Center Hospital; Professor of Medicine, Tufts University School of Medicine, Boston



WILLIAM DAMESHEK, M.D.

4:30 "Animal Health and Human Welfare"

JAMES H. STEELE, D.V.M., M.P.H., Atlanta, Georgia
Chief, Veterinary Public Health Activities, Communicable Disease Center, Consultant: World Health Organization, U. S. Defense Dept. and State Department, American Board of Veterinary Public Health, (Founder), Conference of Public Health Veterinarians (Founder), American Public Assn. (Governing Council), National Board of Veterinary Medical Examiners (Executive Board), National Brucellosis Committee (Executive Board), Military Surgeons Association, U. S. Livestock Sanitary Assn., XV International Veterinary Congress (Plenary Speaker).



JAMES H. STEELE, D.V.M., M.P.H.

5:00 End of Fourth Assembly

No Michigan Clinical Institute Meeting Thursday Evening



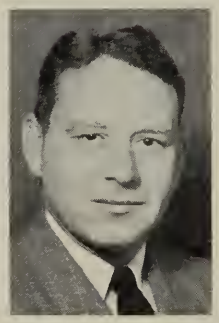
NORMAN F. MILLER, M.D.



HAROLD D. DYKHUIZEN, M.D.



EDWARD F. SLADEK, M.D.



C. PAUL HODGKINSON, M.D.



WILLIAM M. LEFEVRE, M.D.



CECIL W. LEPARD, M.D.



G. S. FISHER, M.D.

FRIDAY, MARCH 15, 1957

A.M.

8:15 **REGISTRATION**—Top of Stairs, Fifth Floor
EXHIBITS OPEN—Fourth Floor

FIFTH ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel
Chairman: HAROLD A. FURLONG, M.D., Pontiac
Secretary: BROOKER L. MASTERS, M.D., Fremont

OBSTETRICS—GYNECOLOGY—PEDIATRICS

8:30 **"Hazards from Improper Use of Certain Drugs Commonly Employed in Obstetric Practice"**
NORMAN F. MILLER, M.D., Ann Arbor
Professor and Head of Department of Obstetrics and Gynecology, University of Michigan

8:50 **"The Pathology and Treatment of Urethral Caruncles"**
HAROLD D. DYKHUIZEN, M.D., Muskegon
Senior Urologist and Consultant in Urology of Hackley and Mercy Hospitals, Muskegon

9:10 **"Pediatric Proctology"**
EDWARD F. SLADEK, M.D., Traverse City
Past President, Michigan State Medical Society

9:30 **"Hemorrhage"**
C. PAUL HODGKINSON, M.D., Detroit
Gynecologist-Obstetrician-in-Chief, Henry Ford Hospital

9:50 **"So You've Got a Diabetic"**
WM. M. LEFEVRE, M.D., Muskegon
Councilor 11 District, Michigan State Medical Society

10:10 **"The Early Diagnosis of Visual Impairment in Children"**
CECIL W. LEPARD, M.D., Detroit
Ophthalmologist-in-Chief, Children's Hospital of Michigan; Associate Professor of Ophthalmology, Wayne State University College of Medicine

10:30 **INTERMISSION TO VIEW EXHIBITS**

11:15 to 12:45 **COLOR TELEVISION PROGRAM,** beamed to the Grand Ballroom, Sheraton-Cadillac Hotel through the co-operation of the staff of The Grace Hospital, Detroit and Smith, Kline and French Laboratories of Philadelphia

11:15 **"Uterine Bleeding"**
GEORGE S. FISHER, M.D., Detroit; E. S. HOFFMAN, M.D., Detroit

11:45 "Diagnosis and Management of Acute Arterial Obstruction"

JAMES B. BLODGETT, M.D., Detroit
Associate Attending Surgeon, Grace Hospital

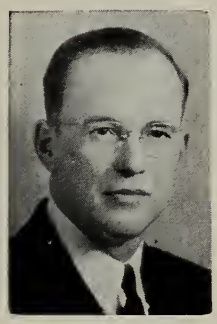
12:15 "Examination of the Patient with Acute Abdominal Pain"

GORDON B. MYERS, M.D., Detroit
Professor of Medicine, Wayne State University College of Medicine

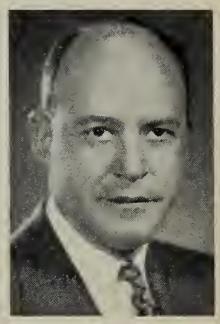
12:45 End of Television Program



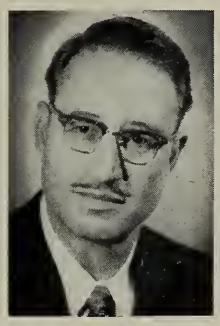
JAMES B. BLODGETT, M.D.



GORDON B. MYERS, M.D.



O. TOD MALLERY, M.D.



C. P. MEHAS, M.D.



FREDERICK W. WILLIAMS, M.D.

SIXTH ASSEMBLY

Grand Ballroom, Sheraton-Cadillac Hotel
Chairman: RUSSELL F. FENTON, M.D., Detroit
Secretary: THEODORE I. BAUER, M.D., Lansing

GENERAL MEDICINE

P.M.

2:00 "Preventive Medicine and Industry"

O. TOD MALLERY, M.D., Ann Arbor
Medical Director, Employers Mutual Liability Insurance Company, Wausau, Wisconsin; formerly Director, Institute of Industrial Health, University of Michigan; Associate Professor of Internal Medicine, University of Michigan

2:20 "Alcoholism and Emotional Immaturity"

C. P. MEHAS, M.D., Birmingham
General Practitioner, Tuberculosis Consultant, Oakland County Health Department

2:40 FINAL INTERMISSION TO VIEW EXHIBITS

3:15 "Pharmaceutical Industry—Servant of Medicine"
Speaker to be announced

3:45 "Diabetic Legs"

FREDERICK W. WILLIAMS M.D., Bronx, New York
President, American Diabetic Association; Associate Clinical Professor, New York Medical College; Vice Speaker, House of Delegates, New York State Medical Society

4:15 Speaker to be announced

4:45 End of Sixth Assembly and the 1957 Michigan Clinical Institute

MSMS Ninety-first Annual Session - 1956

House of Delegates Proceedings

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VI.	Report of Woman's Auxiliary to MSMS	1516	1529	
VII.	Report of Michigan State Medical Assistants Society	1517	1530	
VIII.	Selection of Michigan's Foremost Family Physicians	1517	1535	
IX.	Fifty-Year Awards	1517		
X.	Resolutions and Motions:			
	1. Comprehensive Prepaid Medical Care Insurance Plan	1518	1533	substitute approved (see Res. 32)
	2. Michigan Medical Service Annual Report to MSMS House of Delegates	1518	1533	substitute approved
	3. Honorary Membership to Dean Gordon H. Scott	1518	1532	approved
	4. Postgraduate Education of Other Healing Arts	1518	1531	deferred (see Res. 6)
	5. Practice of Psychotherapy is Practice of Medicine	1518	1533	approved
	6. MSMS Attitude re Other Healing Arts	1519	1531	deferred
	7. Council Minutes to all MSMS Delegates	1519	1531	disapproved
	8. Esteem of House of Delegates for the Late J. Joseph Herbert	1519	1535	approved
	9. ByLaws, Chapter 8, Section 10-g—Procedure in Case of Vacancy on The Council	1519	1530	approved as amended
	10. Report within Seven Days of House of Delegates Proceedings	1519	1532	disapproved (see Res. 39)
	11. Continuation of Councilor Conferences	1520	1532	approved
	12. Expansion of Medical School Facilities at Wayne State University	1520	1533	approved
	13. Establishment of Departments of General Practice in Medical Schools	1520	1532	approved
	14. Deferring Action re Discipline of Members (Mediation-Ethics-Grievance)	1520	1530	approved (see Res. 21)
	15. State and County Prerogatives in Discipline of Members	1520	1531	disapproved
	16. MSMS Approval of County Society Constitution and By-Laws Revisions	1520	1531	disapproved
	17. Equal Health Opportunities for All	1521	1532	approved
	18. ByLaws, Chapter 2, Section 2—Re Membership in County of Practice	1521	1531	disapproved
	19. Committee to Study Use of Word "Clinic"	1521	1532	approved
	20. Honorary Membership to the Late J. Joseph Herbert	1521		
	21. Approval of Mediation-Ethics-Grievance Committee's Recommendations	1521	1531	deferred for one year
	22. New MSMS Headquarters ($5.00 dues increase in lieu of present assessment)	1522	1535 1533	approved approved
	23. Regulation of Ambulance Operation	1522	1535	approved
	24. Appreciation of the Late Henry A. Luce, M.D.	1522	1533	approved
	25. Adequate Funds to Carry Out Civil Defense	1522	1532	as amended approved
	26. Permanent Advisory Committee on Fees	1522		as amended
	27. Constitution, Article X, Sections 1-2-3 — to make Vice Speaker a Voting Member of The Council and of its Executive Committee	1522	1532 (to 1957 House of Delegates)	Approved
	28. Urging Total Participation of M.D.'s in Michigan Medical Service (Heidenreich)	1523	1534	substitute approved (see Res. 30)
	29. ByLaws, Chapter 8, Section 10-j(13)—Changing name of a House of Delegates Reference Committee (National Defense and Disaster Planning)	1523	1531	approved
	30. Urging Total Participation of M.D.'s in Michigan Medical Service (Bowman)	1523	1534	substitute approved

		Introduction of Business	Reference Committee Report
31.	Annual Registration of M.D.'s	1523	1533; 1539 disapproved
32.	Blue Shield Plan for Diagnostic Out-patient Services	1529	1533 substitute approved
33.	Submission of House of Delegates Resolutions in Advance	1529	1539 disapproved
34.	Medical Classes at University of Michigan and Wayne State University to Send Representatives to House of Delegates Sessions	1529	1539 approved as amended
35.	Committee to Study Use of Excess Beds in Tuberculosis Sanatoria	1535	1540 approved
36.	MSMS Representatives on Committee Drafting Uniform Autopsy Code	1535	1539 approved as amended
37.	*Motion:* Information from AMA Delegates	1536	1539 tabled
38.	Appreciation to Harvey V. Higley, Veterans Administration Administrator	1538	1540 approved
39.	Plan for Expediting Work of House of Delegates	1535	1539 substitute approved (see Res. 10)
XI.	Reports of Standing Committees:		
1.	Postgraduate Medical Education	1524	1530
2.	Preventive Medicine and its Sub-Committees	1524	1530
3.	Public Relations and its Sub-Committees	1524	1530
4.	Ethics	1524	1530
5.	Legislative	1524	1530
XII.	Reports of Special Committees:		
1.	Scientific Radio	1524	1530
2.	Advisory Committee to Woman's Auxiliary	1524	1530
3.	Advisory Committee to Michigan State Medical Assistants Society	1524	1530
4.	Committee to Study MSMS Financial Structure ($5.00 dues increase in lieu of present assessment)	1524	1534
XIII.	Reports of Reference Committees:		
1.	On Officers Reports (a) President's Address—1529; (b) President-Elect's Address—1529; (c) AMA Delegates—1529; (d) Woman's Auxiliary—1529; (e) Michigan State Medical Assistants Society—1530.		1529, 1530
2.	On Reports of Standing Committees (a) Postgraduate Medical Education—1530; (b) Preventive Medicine and its Sub-Committees—1530; (c) Public Relations and its Sub-Committees—1530; (d) Ethics Committee—1530; (e) Legislative Committee—1530.		1530
3.	On Reports of Special Committees (a) Scientific Radio—1530; (b) Advisory to Woman's Auxiliary—1530; (c) Advisory to Michigan State Medical Assistants Society—1530.		1530
4.	On Constitution and ByLaws (a) Resolution re Procedure in Case of Vacancy on The Council (ByLaws, Chapter 8, Section 10-g)—1530; (b) Resolution Deferring Action re Discipline of Members—1530; (c) Resolution re Approval of M-E-G Committee Recommendations—1531; (d) Resolution re State and County Prerogatives in Discipline of Members—1531; (e) Resolution re MSMS Approval of County Society Constitution and By-Laws Revisions—1531; (f) Resolution re Membership in County of Practice—1531; (g) Resolution Creating House of Delegates Reference Committee on "National Defense and Disaster Planning"—1531.		1530, 1531
5.	On Resolutions (a) Resolution re Postgraduate Education of Other Healing Arts—1531; (b) Resolution re MSMS Attitude re Other Healing Arts—1531; (c) Resolution re Council Minutes to All MSMS Delegates—1531; (d) Resolution re Report Within Seven Days of House of Delegates Proceedings—1532; (e) Resolution re Continuation of Councilor Conferences—1532; (f) Resolution re Establishment of Department of General Practice in Medical Schools—1532; (g) Resolution re Committee to Study Use of Word "Clinic"—1532; (h) Resolution re Equal Health Opportunities for All—1532; (i) Resolution re Permanent Advisory Committee on Fees—1532; (j) Resolution re Submission of House of Delegates Resolutions in Advance—1539; (k) Resolution re Medical Classes at University of Michigan and Wayne State University to Send Representatives to House of Delegates Sessions—1539; (l) Resolution re Plan for Expediting Work of House of Delegates—1539; (m) Resolution re		1531, 1532, 1539, 1540

		Introduction of Business	Reference Committee Report
	MSMS Representatives on Committee Drafting Uniform Autopsy Code—1539; (n) Resolution re Information from AMA Delegates—1539; (o) Resolution of Approval to Harvey V. Higley—1540.		
6.	On Special Memberships (a) Honorary Membership to J. Joseph Herbert and Dean Gordon H. Scott—1532.		1532
7.	On Legislation and Public Relations (a) Resolution re Practice of Psychotherapy is Practice of Medicine—1533; (b) Resolution re Expansion of Medical School Facilities at Wayne State University—1533; (c) Resolution re Regulation of Ambulance Operation—1533; (d) Resolution re Adequate Funds to Carry Out Civil Defense —1533; (e) Resolution re Annual Registration of M.D.'s —1533 and 1539.		1533, 1539
8.	On Medical Service and Prepayment Insurance..... (a) Resolution re Michigan Medical Service Annual Report to MSMS House of Delegates—1533; (b) Resolution re Comprehensive Prepaid Medical Care Insurance Plans— 1533 and (c) Resolution re Blue Shield Plan for Diagnostic Out-patient Services—1533; (d) and (e) Resolution Urging Total Participation of M.D.'s in Michigan Medical Service—1534.		1533, 1534
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MSMS House of Delegates—1956

Summary of Proceedings

The Ninety-first Annual Session of the Michigan State Medical Society's House of Delegates was held in Detroit, September 24-25, 1956.

The House of Delegates:

1. Adopted with thanks the President's Address, the President-Elect's Address, the report of Delegates to the American Medical Association, the Annual Report of the President of Woman's Auxiliary to Michigan State Medical Society, and the Annual Report of the President of Michigan State Medical Assistants Society.

2. The Annual Reports of The Council (including the Annual Reports of Committees of The Council) were adopted as amended.

3. Adopted Annual Reports of all Standing Committees and of all Special Committees of the Society; also the report of the House of Delegates' Committee to Study MSMS Financial Structure.

4. Elected Ralph G. Cook, M.D., Kalamazoo, and J. H. Sherk, M.D., Midland (posthumously), as Michigan's Foremost Family Physicians for 1956.

5. Took action on proposed amendments to Constitution and By-Laws, as follows: (a) By-Laws, Chapter 8, Section 10-g—procedure in case of vacancy on Council —approved as amended; (b) By-Laws, Chapter 2, Section 2—re membership in county of practice—disapproved; (c) Constitution, Article X, Sections 1-2-3— to make Vice Speaker a voting member of The Council and of its Executive Committee—to 1957 House of Delegates; (d) By-Laws, Chapter 8, Section 10-j (13)— changing name of a House of Delegates Reference Committee (National Defense and Disaster Planning)— approved.

6. Adopted resolutions concerning: (a) Deferring Action re Discipline of Members; (b) Continuation of Councilor Conferences; (c) Establishment of Departments of General Practice in Medical Schools; (d) Committee to Study Use of Word "Clinic"; (e) Equal Health Opportunities for All; (f) Permanent Advisory Committee on Fees (as amended); (g) Practice of Psychiatry is Practice of Medicine; (h) Honorary Mem-

bership to J. Joseph Herbert and Dean Gordon H. Scott; (i) Expansion of Medical School Facilities at Wayne State University; (j) Regulation of Ambulance Operation approved and referred to Committee on Traffic Safety; (k) Adequate Funds to carry out Civil Defense (as amended); (l) Medical Classes at Medical Schools to send Representatives to House of Delegates Sessions (as amended); (m) MSMS representatives on Committee Drafting Uniform Autopsy Code (as amended); (n) Esteem of House of Delegates for J. Joseph Herbert; (o) Appreciation of Henry A. Luce, M.D.; (p) New MSMS Headquarters; (q) Appreciation to H. V. Higley, Veterans Administration Administrator; (r) Committee to Study excess beds in Tuberculosis Sanatoriums.

7. Adopted substitute resolutions concerning: (a) Michigan Medical Service Annual Report to MSMS House of Delegates; (b) Comprehensive Prepaid Medical Care Insurance Plans and Blue Shield Plans for Diagnostic Out-Patient Services; (c) Urging Total Participation of M.D.'s in Michigan Medical Service (two resolutions); (d) Plan for Expediting Work of House of Delegates.

8. Tabled Motion re Information from AMA Delegates.

9. Deferred Resolutions re: (a) Postgraduate Education of Other Healing Arts; (b) MSMS Attitude re Other Healing Arts; (c) Approval of Mediation-Ethics-Grievance Committee's Recomemndations.

10. Disapproved Resolutions concerning: (a) Council Minutes to all MSMS Delegates; (b) Annual Registration of M.D.'s; (c) Submission of House of Delegates Resolutions in Advance; (d) Report Within Seven Days of House of Delegates Proceedings; (e) State and County Prerogatives in Discipline of Members; (f) MSMS Approval of County Society Constitution and By-Laws Revisions.

11. Elected to Special Memberships:

(a) Thirty-one members to Life Membership: (Berrien County) Clarence Gillette, M.D.; (Genesee County) Henry Cook, M.D.; (Ionia County) J. W. C. Fleming, M.D.; (Kalamazoo County) U. Sherman Gregg, M.D.; (Marquette County) Celestin LeGolvan, M.D., and George M. Waldie, M.D.; (Muskegon County) Harry L. Clark, M.D., Marie Keilin, M.D., and Eugene S. Thornton, M.D.; (Oakland County) George L. Hagman, M.D., and John K. Ormond, M.D.; (Wayne County) Stilson R. Ashe, M.D., William N. Braley, M.D., Fritz W. Bramigk, M.D., Bruno B. Brunke, M.D., Peter H. Darpin, M.D., Henri L. Gratton, M.D., Sarkis K. Keshishian M.D., John C. Koch, M.D., Alfred D. LeFerte, M.D., Wm. W. MacGregor, M.D., Emil V. Mayer, M.D.; Wm. R. McClure, M.D., Carey P. McCord, M.D., Wm. E. Miller, M.D., Grover C. Penberthy, M.D., Lyman J. Pinney, M.D., Ralph W. Ridge, M.D., Paul C. Rhode, M.D., Jacob M. Sutherland, M.D. and Elmer L. Whitney, M.D.

(b) Nine members to Retired Membership: (Calhoun) A. D. Sharp, M.D.; (Saginaw County) Lloyd A. Campbell, M.D.; (Wayne County) Ladislaus Bogusz, M.D., Clyde H. Chase, M.D., James C. Danforth, Sr., M.D.; Frank MacKenzie, M.D., William D. Ryan, M.D., Clarence E. Weaver, M.D., and Wirt A. Dawson, M.D.

(c) Fifty-nine M.D.'s to Associate Membership: (Marquette-Alger County) Sara Schweinsberg, M.D.; (Muskegon County) Mary Ellen Hennessey, M.D.; (Washtenaw County) Malcolm A. Bagshaw, M.D., Joseph B. Boulos, M.D., Gerald L. Brody, M.D., Joseph H. Chandler, M.D., Norman E. Clarke, Jr., M.D., Mark A. Everett, M.D., Norman A. Fox, Jr., M.D., Robert L. Gillett, M.D., Glenn G. Golloway, M.D., Jack E. Goodwin, M.D., John T. Hayes, M.D., Erwin P. Hoffman, M.D., Clifford L. House, M.D., Edwin M. Hubbard, M.D., A. Hartwell Jewell, Jr, M.D., J. A. Arthur Lavigne, M.D., George E. Lewis, Jr., M.D., John D. Lynch, M.D., James W. Mackenzie, M.D., Henry E. Malcolm, M.D., Rolf F. Miller, M.D., Robert F. Muller, M.D., Paul Natvig, M.D., Rudolf E. Nobel, M.D., Leon D. Ostrander, Jr., M.D., Warren H. Pearse, M.D., Chrisostomo C. Santos, M.D., Harry J. Schmidt, M.D., Russell Scott, Jr., M.D., Irving Shapiro, M.D., Edwin M. Smith, M.D., Philip R. Steinmetz, M.D., John P. Stewart, M.D., George R. Thompson, M.D., Frederik S. Van Reesema, M.D., Peter D. Vreede, M.D., Donald J. Holmes, M.D., Prasana K. Pati, M.D., John B. Tisserand, M.D., William S. Wilson, M.D., and James A. Wood, M.D.; (Wayne County) Oscar L. Barland, M.D., Robert Borchak, M.D., Richard A. Bruehl, M.D., John P. Connolly, M.D., Douglas R. Coyne, M.D., Leonard Fox, M.D., Maurice J. Hauser, M.D., Loyal W. Jodar, M.D., Benjamin Mihay, M.D., John H. Schlemer, M.D., Fredrick L. Sperry, M.D., Bela J. Szappanyos, M.D., Jerome S. Weingarten, M.D., Frank A. Weiser, M.D., Joseph Weiss, M.D., and Charles R. Williams, M.D.

12. Elected the following officers:

(a) A. E. Schiller, M.D., Detroit, as Councilor of the 1st District (1961).

(b) H. J. Meier, M.D., Coldwater, as Councilor of the 3rd District (1961).

(c) Ralph W. Shook, M.D., Kalamazoo, as Councilor of the 4th District (1961).

(d) C. Allen Payne, M.D., Grand Rapids, as Councilor of the 5th District (1961).

(e) H. H. Hiscock, M.D., Flint, as Councilor of the 6th District (1961).

(f) W. D. Barrett, M.D., Detroit (1958); W. H. Huron, M.D., Iron Mountain (1958); and R. L. Novy, M.D., Detroit (1958), as Delegates to the American Medical Association.

(g) William Bromme, M.D., Detroit (1958); J. R. Rodger, M.D., Bellaire (1958); and G. W. Slagle, M.D., Battle Creek (1958), as Alternate Delegates to the American Medical Association.

(h) G. W. Slagle, M.D., Battle Creek, as President-Elect.

(i) K. H. Johnson, M.D., Lansing, as Speaker, House of Delegates.

(j) J. J. Lightbody, M.D., Detroit, as Vice Speaker, House of Delegates.

Michigan State Medical Society

Ninety-first Annual Session

DIGEST OF PROCEEDINGS OF THE HOUSE OF DELEGATES

MONDAY MORNING SESSION

September 24, 1956

The ninety-first annual session of the House of Delegates of the Michigan State Medical Society, held at the Sheraton-Cadillac Hotel, Detroit, Michigan, on September 24-25, 1956, convened at 10 a.m., J. E. Livesay, M.D., Speaker of the House, presiding.

I. RECORD OF ATTENDANCE

Office	*Officer*	*Meetings*				
		1st	*2nd*	*3rd*	*4th*	*5th*
Speaker	J. E. Livesay, M.D.	x	x	x	x	x
Vice-Speaker	K. H. Johnson, M.D.	x	x	x	x	x
Secretary	L. Fernald Foster, M.D.	x	x	x	x	x
County	*Delegate*					
1. Allegan	L. F. Brown, M.D.	x	x	x	x	x
2. Alpena-Alcona-Presque Isle	E. S. Parmenter, M.D.	x	x	x	x	x
3. Barry	A. B. Gwinn, M.D.	x	x	x	x	x
4. Bay-Arenac-Iosco	O. J. Johnson, M.D.	x	x	x	x	x
	D. A. Bowman, M.D.	x	x	x	–	x
5. Berrien	D. W. Thorup, M.D.	x	x	x	x	x
	N. J. Hershey, M.D.	x	x	x	x	x
6. Branch	H. J. Meier, M.D.	x	x	x	x	–
7. Calhoun	H. C. Hansen, M.D.	x	x	x	x	x
	J. W. Hubly, M.D.	x	x	x	x	x
8. Cass	S. L. Loupee, M.D.	x	x	x	x	x
9. Chippewa-Mackinac	W. F. Mertaugh, M.D.	x	x	x	x	x
10. Clinton	F. W. Smith, M.D.	x	x	x	x	x
11. Delta-Schoolcraft	J. H. Fyvie, M.D.	x	x	x	x	x
12. Dickinson-Iron	D. R. Smith, M.D.	x	x	x	x	x
13. Eaton	P. H. Engle, M.D.	x	x	x	x	x
14. Genesee	C. W. Colwell, M.D.	x	x	x	x	x
	C. K. Stroup, M.D.	x	x	x	x	x
	F. D. Johnson, M.D.	x	x	x	x	x
	G. E. Anthony, M.D.	x	x	x	x	x
	F. W. Baske, M.D.	x	x	x	x	x
15. Gogebic	D. C. Eisele, M.D.	Not represented				
16. Grand Traverse-Leelanau-Benzie	D. G. Pike, M.D.	x	x	x	x	x
17. Gratiot-Isabella-Clare	E. S. Oldham, M.D.	x	x	x	x	x
18. Hillsdale	A. W. Strom, M.D.	x	x	x	x	x
19. Houghton-Baraga-Keweenaw	P. S. Sloan, M.D.	x	x	x	x	x
20. Huron	C. W. Oakes, M.D.	x	x	x	x	x
21. Ingham	J. M. Wellman, M.D.	x	x	x	x	x
	H. W. Harris, M.D.	x	x	x	x	x
	F. L. Troost, M.D.	x	x	x	x	-
22. Ionia-Montcalm	R. E. Rice, M.D.	x	x	x	x	x
23. Jackson	W. A. Wickham, M.D.	x	x	x	x	x
	H. W. Porter, M.D.	x	x	x	x	x
24. Kalamazoo	W. A. Scott, M.D.	x	x	x	x	x
	S. E. Andrews, M.D.	x	x	x	x	x
	F. C. Ryan, M.D.	x	x	x	x	x
25. Kent	K. E. Fellows, M.D.	x	x	x	x	x
	W. J. Fuller, M.D.	x	x	x	x	x
	R. A. Rasmussen, M.D.	x	x	x	x	x
	A. V. Wenger, M.D.	x	x	x	x	x
	W. C. Beets, M.D.	x	x	x	x	x
	J. T. Boet, M.D.	x	x	x	x	x
	G. W. DeBoer, M.D.	x	x	x	x	x
26. Lapeer	D. J. O'Brien, M.D.	x	x	x	x	x
27. Lenawee	G. C. Wilson, M.D.	x	x	x	x	–
28. Livingston	H. C. Hill, M.D.	x	x	x	x	x
29. Luce	D. C. Adams, M.D.	–	x	x	x	–
30. Macomb	Sydney Scher, M.D.	x	x	x	x	x
31. Manistee	E. A. Oakes, M.D.	x	x	x	x	x
32. Marquette-Alger	A. S. Narotzky, M.D.	x	x	x	x	x
33. Mason	H. G. Bacon, Jr., M.D.	x	x	x	x	x
34. Mecosta-Osceola-Lake	Paul Ivkovich, M.D.	x	x	x	x	x
35. Menominee	J. R. Heidenreich, M.D.	x	x	x	x	x
36. Midland	M. J. Ittner, M.D.	x	x	x	x	x
37. Monroe	T. A. McDonald, M.D.	x	x	x	x	–
38. Muskegon	R. D. Risk, M.D.	x	x	x	x	x
	N. W. Scholle, M.D.	x	x	x	x	x
39. Newaygo	J. P. Klein, M.D.	x	x	x	x	x
40. North Central	E. H. Rodda, M.D.	x	x	x	x	x
41. Northern Michigan	J. R. Rodger, M.D.	x	x	x	x	x
42. Oakland	J. M. Markley, M.D.	x	x	–	x	x
	P. E. Sutton, M.D.	x	x	x	x	x
	H. A. Furlong, M.D.	x	x	x	x	–
	E. B. Cudney, M.D.	x	x	x	x	x
	E. W. Bauer, M.D.	x	–	x	x	x
	W. J. Zimmerman, M.D.	x	x	x	x	x
43. Oceana	W. G. Robinson, M.D.	Not represented				
44. Ontonagon	C. R. Lahti, M.D.	Not represented				
45. Ottawa	Otto Vander Velde, M.D.	x	x	x	x	x
46. Saginaw	J. P. Markey, M.D.	x	x	x	x	x
	A. C. Stander, M.D.	x	x	x	x	x
	F. J. Busch, M.D.	x	x	x	x	x
47. Sanilac	K. T. McGunegle, M.D.	x	x	x	x	x
48. Shiawassee	C. L. Weston, M.D.	x	x	x	x	x
49. St. Clair	J. F. Beer, M.D.	x	x	x	x	x
50. St. Joseph	S. A. Fiegel, M.D.	x	x	x	x	x
51. Tuscola	L. L. Savage, M.D.	x	x	x	x	x
52. Van Buren	F. J. Loomis, M.D.	x	x	x	x	x
53. Washtenaw	R. W. Teed, M.D.	x	x	x	x	x
	O. K. Engelke, M.D.	x	x	x	x	x
	P. S. Barker, M.D.	x	x	x	x	x
	H. F. Falls, M.D.	–	x	x	x	x
	G. H. Bauer, M.D.	x	x	x	x	x
54. Wayne	L. R. Leader, M.D.	x	x	x	x	x
	L. J. Bailey, M.D.	x	x	x	x	x
	R. R. Cooper, M.D.	x	x	–	x	x
	R. L. Novy, M.D.	x	x	x	–	x
	J. J. Lightbody, M.D.	x	x	x	x	x
	J. G. Molner, M.D.	x	x	x	x	x
	E. A. Osius, M.D.	x	x	x	x	x
	E. H. Fenton, M.D.	x	x	x	x	x
	C. I. Owen, M.D.	x	x	x	x	x
	W. S. Reveno, M.D.	x	x	x	x	x
	D. I. Sugar, M.D.	x	x	x	–	x
	W. W. Babcock, M.D.	x	x	x	x	x
	G. S. Bates, M.D.	x	x	x	x	x
	M. L. Lichter, M.D.	x	x	x	x	–
	C. W. Sellers, M.D.	x	x	x	x	x
	J. B. Blodgett, M.D.	x	x	x	x	x
	W. S. Carpenter, M.D.	x	x	x	x	x
	W. L. Brosius, M.D.	x	x	x	x	x
	M. R. Weed, M.D.	x	x	x	x	–
	E. G. M. Krieg, M.D.	x	x	x	x	x
	A. Hazen Price, M.D.	x	x	x	x	x
	R. F. Fenton, M.D.	x	x	x	x	x
	C. L. Candler, M.D.	x	x	x	x	x
	R. H. Pino, M.D.	x	x	x	x	x
	F. P. Rhoades, M.D.	x	x	x	x	x
	P. C. Gittins, M.D.	x	x	x	x	x
	C. K. Hasley, M.D.	x	x	x	x	x
	Louis Jaffe, M.D.	x	x	x	x	x
	A. D. Rudemann, Sr., M.D.	x	x	x	x	x
	E. C. Texter, M.D.	x	x	x	x	x
	H. F. Dibble, M.D.	x	x	x	x	x
	Saul Rosenzweig, M.D.	x	x	x	x	–
	R. V. Walker, M.D.	x	x	x	x	x
	A. E. Price, M.D.	x	x	x	x	–
	L. S. Fallis, M.D.	x	x	x	x	–
	L. A. Pratt, M.D.	x	x	–	–	x
	S. E. Gould, M.D.	x	x	–	x	–
	E. H. Lauppe, M.D.	x	x	x	x	x
	H. B. Fenech, M.D.	x	x	x	x	x
	J. E. Croushore, M.D.	x	x	x	x	x
	L. T. Henderson, M.D.	x	x	x	x	x
	J. G. Bielawski, M.D.	x	x	x	x	x
	J. E. Hauser, M.D.	x	x	x	x	x
	D. A. Young, M.D.	x	x	x	x	x
	J. A. Kasper, M.D.	x	x	x	–	x
	J. D. Fryfogle, M.D.	x	x	x	x	x
	Myer Teitelbaum, M.D.	x	–	x	x	–
	William Sherman, M.D.	x	x	x	x	x
	L. W. Korum, M.D.	x	x	x	x	x
	G. S. Fisher, M.D.	x	x	x	–	x
	H. C. Rees, M.D.	x	x	x	x	–
	E. C. Long, M.D.	x	x	x	x	x
55. Wexford-Missaukee	R. V. Daugharty, M.D.	x	x	x	x	x

IN MEMORIAM

Each year at this time we announce the names of former members of this House who have passed away. I will also announce the passing of eighty-nine members of the Michigan State Medical Society since we last met.

Former Delegates and Alternates were:

Delta County—J. J. Walch, M.D.
Ingham County—E. H. Faust, M.D.; H. W. Wiley, M.D.
Kent County—Torrance Reed, M.D.
Menominee County—A. R. Peterson, M.D.
Midland County—J. H. Sherk, M.D.
Monroe County—W. J. Gelhaus, M.D.
Oakland County—R. H. Baker, M.D.
Shiawassee County—J. S. Janci, M.D.
Washtenaw County—W. M. Brace, M.D.
Wayne County—C. D. Brooks, M.D.; William Hamilton, M.D.; C. E. Simpson, M.D., K. L. Swift, M.D.
J. Joseph Herbert, Legal Counsel

May we stand, please, in memory of these men.

II. PRESIDENT'S ADDRESS

By W. S. Jones, M.D.

I have a word of advice for you as I bring you my last message as President of your State Society: "If you don't want to work, don't let them give you this job of being President." The Council, its Executive Committee, and even the staff have kept my nose on a grindstone, my neck in a noose, and my feet on the road ever since Bob Baker placed this seemingly innocuous ribbon around my innocent neck.

But I won't say I haven't enjoyed it, because I have.

I figure that working for the Michigan State Medical Society is just working for myself, because the Michigan State Medical Society is me, and it's you, and it's every doctor you represent. Perhaps we forget that sometimes. In fact, I know we do, because I've had the good fortune to talk to, and with, a large number of the county medical societies of this State; and, frankly, what some of our members don't know about their state society would fill a book—maybe several books.

Seriously, we've got a big task before us in communication. We've got men working for us who are experts in the field of communication; but they can't make us communicate with each other and with the rest of our membership unless we want to carry the message.

There are so many messages, and so many people who should hear them! The policies of the House of Delegates and the decisions made by The Council are sound. They are invariably in the public interest.

But, so often our own membership is not as informed as it should be. I believe that the best way to inform them is by word of mouth. By such means we can give the whole story, and each listener has an opportunity to ask questions for clarification. I am not decrying the value of bulletins, the Secretary's Letter, the JOURNAL, or other means of informing our members, but I do see the importance of having a few people in every county society who will keep themselves informed, and who will make it their responsibility to see that all members of that county society are equally well posted.

These message carriers must be you, gentlemen, the members of this House of Delegates, and I hope that you will not fail in this service. It is a year-round responsibility. If for some reason you feel uninformed, or if there are additional facilities you feel should be made available to keep you informed, it is within your power as a body and as individuals to obtain them.

An informed membership can be a great public relations force, for by our members' actions and by their words in each of the communities in our state, our policies and programs are best advanced.

This is not said to decry the value of our formal public educational program. The use of radio, television, newspapers, medical forums, adult education, and conferences of various natures are necessary and vital to our task, but they cannot do the job alone. The message must go from you to our members, and from them to the public as well. Now, let's see what we have to talk about.

I could review the work done this past year, the progress made, the battles won; but as the newsmen say, "There's nothing so dead as yesterday's newspaper." In fact, they call their files of yesterday's newspapers a "morgue." So, I would prefer to talk about the problems facing us today.

Certainly, we are faced with the need of reviewing Blue Shield and Blue Cross and the effect that each is having upon the practice of medicine in the several communities of Michigan.

A tremendous amount of work has been done by MSMS committees during the past year in an attempt to unravel the knotty problems that are involved in working with these two eminently successful plans. I say "successful" because the public has accepted them. They have become part of the warp and woof of our medical-economic pattern as they cover 50 per cent of our patients today. But their very success places a responsibility on us to, first, understand these plans and appreciate their advantages and their weaknesses; second, not to expect from them answers to problems which are rightfully to be found in our own ethics and traditions; third, to support them by the most scrupulous adherence to the principles of fair play.

The doctor who expects these plans to provide him with an extraordinary income, who expects them to solve the problem of division of fees, and who takes advantage of the plans to increase his practice beyond his competence, is a menace to his fraternity. The converse is equally true. We can solve these problems —but we can do so only with patience, good will, and being reasonably unselfish.

Another problem is the legislative situation. The legislature has been kind to us for the past several years. But there are powerful forces in the legislature working against us and the principles we stand for. There are still other legislators who are our friends but whose patience is wearing thin because they are constantly being bombarded with requests for the solution to problems that rightfully should be solved outside the legislature, and which are not solved.

And then there are problems that need legislative action. To be quite specific: Certain unions, the chiropractors, the naturopaths and various other groups are powerful opponents, either singly or in their aggregate. The osteopathic problem is not one which the legislature should solve. We should solve it!

Problems such as the need for expansion of medical training opportunity, annual registration of M.D.'s, migratory labor, a state medical examiner system, and a single Healing Arts Practice Act are problems that need legislative action. I urge you not to close your eyes to the situation.

In this regard, you and I have responsibilities beyond that even of our members, because we are in the position of determining policies which affect the millions of people in Michigan. That is an obligation we accept with our office, and as citizens of this great state we cannot fail to discharge those obligations.

Certainly, the coming election provides us with an

opportunity to pick good men for public office who will help us solve these problems. I am told there are some fifty critical legislative contests out of the 160 that will be determined in this election. These contests are so balanced that hard work and strong support can tip the balance for good or bad. We can be that force—but it means recognizing duties other than those of healing the sick.

At the risk of incurring your displeasure, I feel the necessity of pointing to other problems facing us. I will not go into them deeply, but will just comment briefly

The veterans' care program and medical care of servicemen's dependents:—Both of these programs are in delicate balance and need your understanding. By the alert action of The Council and the courageous stand taken by the head of the Veterans Administration, Mr. H. V. Higley, the home town care plan for veterans was saved in Michigan. What seems to be a reasonable program has been outlined for the medical care of servicemen's dependents. But there will be "bugs" in that program too, and if it is to be handled properly it will need your wisdom and understanding.

The mental health problem:—Don't think you can dodge that one, nor that you can leave it to the psychiatrists to solve. We must recognize the primary interest of the psychiatrists in this field, but we also must recognize that they cannot and should not fight the battle alone.

Long ago the Michigan State Medical Society enunciated the policy which has been characterized as the "brains versus bricks" approach. Of late there are sympathetic ears in our state capitol to this idea, and it is up to us to provide them with reasonably, clearly-documented, unselfish advice.

Supply of medical personnel:—We haven't solved the problem of optimum supply of doctors of medicine, nor of medical associates, nor of placement of that medical personnel. We have gone far on this road, and we can be proud of our progress. I commend the M.D. placement program; but there are still occasions when doctors either have not made themselves available or were not available.

I point to the need of expanding the teaching personnel of Wayne State University College of Medicine, the extension of the medical associate training and recruitment campaign, and the establishment of a placement system for medical associates. Chronic disease hospitals and convalescent care homes will be an acute and major problem for the next few years until policies are developed for the financing, establishment and operation of such facilities.

I don't believe we want to be in the position of objecting futilely and fitfully to the policies that must and will be established. I think we want to be in the position of guiding the establishment of those policies.

I could go on and talk of the need for a private enterprise periodic health appraisal program, of social security, of the placement of optometrists, chiropodists and psychologists. I could review the problems of administration posed by the expanding use of radioactive materials. I could expand upon the dangers involved in the fabulous growth of lay-dominated health agencies.

Our problems are growing in severity and in number. We must grow as an organization if we expect to meet those problems with well-thought-out analyses and solutions. This means, without question, the expansion of our present headquarters office in Lansing or, more likely, the building of a new headquarters facility, specifically designed to meet our needs and permit our expansion. I recommend such a project to you. The start toward that end is long overdue.

In doing so, I express my deepest confidence that the medical profession can and will solve these problems. This body here, that has existed for over ninety years, will contribute to their solution.

Your Council is as devoted and sensible a group of skilled men as there exists in these United States. We have a staff that is imaginative and reliable.

The truth of these statements is accurately reflected in the two great losses we have suffered during the past year. I refer to the passing of Dr. Robert Baker and Mr. J. Joseph Herbert. In the former, we had a man who had served his profession far beyond the call of duty—a brilliant man who gave of his heart and his mind to medicine. Mr. Herbert has been equally valuable. His twelve years of service to medicine exemplified him as our friend and as the greatest of medical-legal counsels.

My earnest plea to you is that you have courage and patience, faith in your own leadership, and the wisdom to seek the advice of your medical and lay brothers, and then pass the word along.

Thank you for this privilege of speaking to you; and, in turn, I offer to each of you a personal invitation to attend the Officers' Night Banquet on Wednesday night. I'll see you there.

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Dr. Jones' address was referred to the Reference Committee on Officers' Reports.

III. PRESIDENT-ELECT'S ADDRESS

By Arch Walls, M.D.

I wish to take this opportunity to express my appreciation for the great honor you have bestowed upon me. It is the highest position an individual is granted in his profession in the state society, and MSMS is one of the finest in the United States. I will assume the many duties and responsibilities with increased humility. I trust that I will be able, with your generous co-operation, to carry out these duties to the fullest extent and, by so doing, to keep the high standard set by my predecessors.

While addressing you today, it might be well to point out to you the responsibilities of a delegate. To understand fully and appreciate the importance of being a delegate to the Michigan State Medical Society House of Delegates, it is necessary to review the administrative setup of the state society.

The House of Delegates is the legislative and policy-making group of organized medicine. Its members, 135 in number, elected by the component county societies on the basis of one delegate for every fifty members or major fraction thereof, meet regularly once a year. Their policies and recommendations are implemented by The Council, which meets three times a year, and the Executive Committee, which meets once a month.

It is obviously apparent that this democratic plan gives the individual member of the Michigan State Medical Society his representation in the development of medical plans through his chosen delegate. There devolves, therefore, upon the delegate a responsibility of reflecting his constituents' views in the deliberation of the House of Delegates. To do this adequately, he must enter into discussions and lend his advice and counsel to the House of Delegates and its reference committees.

His responsibilities do not end there. He has not fulfilled his entire responsibility unless, when he returns home, he fully explains to his county society the deliberations and decisions of the House of Delegates and the reasons for such actions. Only by such a full and thorough report can the individual member of the Michigan State Medical Society be expected to react intelligently to any proposals propounded by his legislative body.

Your delegate is a most important person, and should be chosen only on the basis of his willingness to assume the full responsibilities of that assignment.

Progress of Medicine.—Modern medicine has made outstanding gains in the various scientific fields.

In immunization, we have seen great progress in the control of many diseases as new and better vaccines work toward the eradication of polio, smallpox, diphtheria and tetanus. These will continue to improve, and our armamentarium will give us new hope for great service in preventive medicine.

In research, great strides are being made toward the control of major neurologic disorders, in determining the relationship between viruses and cancer, in controlling infectious forms of arthritis, and even in discovering the cause of atherosclerosis.

In surgical procedures, we are doing things today, safely and routinely, that were almost undreamed of twenty years ago. The swift advance in anesthesia and in techniques of surgery are permitting our surgeons to work in areas that have heretofore defied their scalpel.

Big victories are behind and ahead of us; and although their stories have not yet been fully told, the public has taken for granted that we will continue to progress.

Yes, together with those whose science is related to medicine, we have made great strides in medical science. We will make even greater scientific progress, and the Michigan State Medical Society will continue to be a major force in bringing about those advancements.

Art of Medicine.—But we must do more than advance medicine as a science. We must also advance the art of medicine. We understand our healing work to be something more than that of a scientific mechanic working upon a mechanical body with mechanical equipment. We know the value of the "personal touch." of the human relationship between the doctor and his patient. We are constantly reminded by our medical scientists themselves of the importance of the emotional factor in the patients who entrust themselves to us.

These things are of tremendous import to our patients and to our profession, and yet it is in this area that we are making least progress. I invite this to your attention because, as a Society and as individual doctors, I believe we have a responsibility to do something about it, and I believe we can do something about it.

You will have before you recommendations for improvements in the handling of mediation, ethics and grievance problems. That is a forward step. I think we can go further. I think we can go behind the surface problem and, by education and moral suasion, remedy the condition that has caused these symptoms.

I believe we should call upon the great thinkers in the realm of the spirit to address us and write for our journals. just as we call upon the great researchers in the realm of science. God has endowed us with generous human consideration for the sick, and we must devise the ways and the means, the procedures and the time to give that consideration to our patients.

I urge our medical schools to do likewise. If they were to do so, their medical graduates would be better doctors even though it meant a partial loss of hours spent on more scientific subject matter.

Our Responsibility as Citizens.—The practice of medicine involves many things besides the treatment of the patient. It involves our place as a citizen of our country and our community. For every dollar we have spent for our education the community has contributed three, and the people rightly expect a return in addition to the competent medical care of the sick.

To give this additional service we must co-operate with others and we must have the co-operation of others. One segment of those we serve is represented by labor unions. No labor leader to my knowledge has ever come to the MSMS and offered either his help or the help of his union in solving the medical and health problems confronting the people. That is an error on their part.

If labor unions expect to improve the medical and health care of their members, they must co-operate with the medical profession; for no labor union can render medical care—only a physician can do that—and the conditions under which that medical care is rendered must be satisfactory to patient and physician alike or it will fail in its purpose.

But we must not make a similar error by refusing to welcome their help if it is offered. I have never known an offer of assistance from any source to be rejected. We have in the past indicated that our door was open.

I say again that the Michigan State Medical Society will give its most earnest consideration to any proffer of assistance by labor unions which they feel they can give in aiding the Medical Society and its members to render more and better medical and health care to the people of Michigan. I believe that that same open door policy must apply also to other professions—to osteopathy, psychology and chiropody, to mention only a few.

Public Relations.—Today's doctor of medicine and his society must do more than accept the aid of others. We can be proud that in Michigan our Society has adopted an attitude and a course of action to improve, by deed and by word, the welfare of the people. We will gain the good will of the people if we gain public understanding of that program, but to do so we must identify our activities and purposes with the public interest.

This is not solely a matter of publicity. It is certainly not a whitewash campaign, nor is it a political maneuver. Rather, it is a dedicated effort to carry out better a program already established by our Council and our Public Relations Committee.

In includes emergency call plans for twenty-four hour medical service; the fair adjustment of grievances; the orientation of our membership and of those who mold public opinion to the true purposes and activities of medical organization; the guarantee of medical care for all, and many other projects. These activities will win friends if we as individuals pledge our personal service both to the project and to its philosophy, rather than being satisfied with mere lip service.

A case in point: Your co-operation given during the emergency created by the discovery of a polio vaccine deserves commendation. You and your Society acted in the public interest, with no thought of personal gain. Now that the emergency created by a short supply of the vaccine is over, or nearly so, we can expect the immunization program to be relieved of governmental regulation and returned to the private practitioner. And I am sure that we can develop and support a program of polio immunization which will provide maximum benefits to the people.

I urge every county society and every doctor to read the MSMS brochure, "Winning Friends for Medicine," and carry out its recommendations where they are applicable.

Conclusion.—We should be proud to be members of the Michigan State Medical Society. It is progressive and able and, I firmly believe, the finest in these United States. We are blessed with an executive staff of unusual ability and devotion.

Dr. L. Fernald Foster, as our extremely capable Secretary, has sacrificed time and talent far beyond the call of duty or compensation, and is known from coast to coast for his ability in medical organization. He has been assisted by our Executive Secretary, Mr. William J. Burns, and our Public Relations Counsel, Mr. Hugh W. Brenneman, both of whom have received national honors and recognition for the work they have done for us and for the medical profession generally.

I commend these men and their devoted staff, and pledge myself, with your active help, to the carrying out of my responsibilities during the coming year.

* * *

Dr. Walls' address was referred to the Reference Committee on Officers' Reports.

IV. REPORTS OF THE COUNCIL

By D. Bruce Wiley, M.D., Chairman

The annual report of The Council is printed in your Handbook for Delegates, beginning on page 45. You have all had an opportunity to read and study it, and I shall not go over it at this time.

The Council wishes to present the following supplemental report as of September 23, 1956:

1. *Membership.*—On September 1, 1956, the membership of the Michigan State Medical Society totaled 6,157. This compares very favorably with the total of 5,899 at the same time last year.

2. *Finances.*

FINANCIAL REPORT FOR PERIOD ENDING AUGUST 31, 1956

Account	On Hand 1/1/56	Income to 9/1/56	Expenses to 9/1/56	Balance on Hand 9/1/56
General Fund	$ 77,593.98	$155,829.41	$113,822.68	$119,600.71
Annual Session		23,657.50	3,965.41	19,692.09
Michigan Clinical Institute		13,360.00	13,064.20	295.80
The Journal		60,412.93	54,259.35	6,153.58
Public Education	76,494.02	33,820.40	27,147.27	83,167.15
Public Service	281.28	18,871.13	8,247.82	10,904.59
Professional Relations	6,805.30	28,306.67	21,243.74	13,868.23
Public Education Reserve	30,000.00	26,958.75		56,958.75
Rheumatic Fever Control	22,704.24	10,000.00	17,161.17	15,543.07
Contingent Fund	37,267.34	16,175.25		53,442.59
Building Fund	13,788.46	10,783.50	8,277.68	16,294.28
Totals	$264,934.62	$398,175.54	$267,189.32	$395,920.84

3. *Michigan Medical Service.*—An up-to-date report on this corporation, including its finances, will be presented to you at the meeting of Michigan Medical Service membership tomorrow, September 25, at 2 p.m., in Michigan Medical Service headquarters at 441 East Jefferson Avenue, Detroit. All MSMS delegates are members of Michigan Medical Service Corporation and are expected to attend this important annual meeting (which will be preceded by a 1 p.m. luncheon, compliments of Michigan Medical Service, also in its headquarters).

4. *Michigan's Foremost Family Physician of 1956.*—Selection of one of our Michigan general practitioners as nominee for the AMA Gold Medal Award is the privilege of the MSMS House of Delegates. According to the established procedure, the field of nominees has been narrowed by The Council to three, from which the House of Delegates elects one. The three nominees are:

Ralph Gilmore Cook, M.D., Kalamazoo
Henry J. Meyer, M.D., Saginaw
Paul Van Riper, M.D., Champion

This year The Council recommends that the House of Delegates present a second Michigan Foremost Family Physician Award posthumously to Joseph H. Sherk, M.D., of Midland, who died June 8, 1956. Had Dr. Sherk lived just a few months longer, his record of service to humanity would have made him eligible to favorable consideration for this award.

5. *List of Non-members.*—Pursuant to the House of Delegates' instructions of 1948, The Council (through Secretary L. Fernald Foster, M.D.) today submits a list of former members whose 1956 MSMS dues were not paid as of September 1, 1956. To insure accuracy, this list recently was submitted to and certified as correct by our component county and district medical society secretaries.

6. *MSMS Health and Accident Insurance Program.*—The report to September 14, 1956, supplied by the carrier (Provident Life and Accident Insurance Company of Chattanooga, Tennessee) is as follows:

Premiums collected	$574,412.95
Premiums earned	539,073.28
Claims paid	276,516.05
Reserves on claims reported and in process of payment	60,984.01
Reserves on claims incurred but unreported	17,140.48
Total claims paid and claim reserves	354,640.54
Loss ratio on earned and incurred basis	65.79 per cent

7. *Invitations to All New Practitioners.*—As instituted in 1954, all doctors of medicine who entered practice in Michigan since the last MSMS Annual Session recently were sent special invitations to attend the 1956 convention. In this group of over 400, nonmembers as well as members were included, with the thought that the Annual Session would indicate to nonmembers some of the many values of association with MSMS, recognized as one of the top three progressive state medical societies in the United States.

8. (a) *Death of J. Joseph Herbert.*—The Council announces with deep regret the passing of J. Joseph Herbert, who served as Legal Counsel of the Michigan State Medical Society for ten and one-half years. Mr. Herbert died in his sleep on July 28, shortly after returning from the three-day Mid-summer Session of The Council, in which he took his usual active part. The Michigan State Medical Society has lost an ardent and enthusiastic worker in Joe Herbert, a man much admired and loved by hundreds of our members.

(b) *Death of Immediate Past-President Robert H. Baker.*—Another sad announcement is the passing, on September 6, of beloved Bob Baker, who for years devoted generously of his time and energy to the betterment of the medical profession of this State and country.

Mr. Speaker, may we have your permission to pause in this report for a minute, as you may wish to request the House of Delegates to stand in memory of Dr. Baker and Mr. Herbert. (Silent standing tribute.)

9. *Poll on Social Security Question.*—The report on the social security poll, conducted among the component county and district societies of Michigan following an AMA request, is attached to this Council report as addenda. Twenty-two out of fifty-five societies did not reply. The reports of the balance were inconclusive. Some were opposed to compulsory social security for physicians; others favored social security as presently constituted, and some voted for a voluntary plan of social security for M.D.s. The issue, therefore, appears to be one which the House of Delegates may wish to decide.

10. *Medicare Program.*—The U. S. Congress recently adopted Public Law 569, known as the Medicare Act, to provide medical and surgical care not formerly available to servicemen's dependents who could not utilize existing military facilities. These dependents may now be treated, at government expense, by civilian physicians.

This 76 million dollar military dependents' medical care Act was discussed at an AMA-sponsored conference in Chicago on July 28-29 by state medical society representatives and Department of Defense personnel—the latter being most co-operative with the special Medical Advisory Committee.

The following key conclusions were reached at the Chicago conference:

(1) Fees will not be set on a national level but will be set by each state (or even county) medical society.

(2) The Department of Defense will accept any reasonable fee.

(3) Doctors of medicine must accept the established fee without an additional charge.

(4) Fee conflicts will be arbitrated by a local physicians' grievance committee.

(5) The government will not pay for elective procedures or for treatment of chronic illness.

(6) The program will be launched December 8.

The MSMS Council has appointed Michigan Medical Service as its negotiating and physical agent, with MMS Executive Vice President Jay C. Ketchum as the contact man.

Looking for the best plan of operation, the Special Advisory Committee has developed eight drafts of the regulations to implement the Medicare Act. As soon as Draft 8 of the implementing directions is approved by the Department of Defense, copies will be made available by the AMA to state societies, and MSMS in turn will immediately advise its fifty-five component societies. Some time thereafter a supplementing set of regulations will be issued jointly by the Departments of the Army, Navy, Air Force and Public Health Service to amplify and detail the operational implementation of DOD directive, and copies of these will be sent by the AMA to the states and by MSMS to its components.

AMA representatives will be continuing their contact with the appropriate government agencies as these developments occur; and, in like manner, Michigan Medical Service will continue its efforts in behalf of the medical profession of Michigan and the people whom our physicians serve.

11. *Governor's Study Commission on Prepaid Hospital Care Plans.*—During the past year a series of articles on Blue Cross and later Blue Shield appeared as feature articles in the *Detroit Free Press,* following the request of Michigan Hospital Service to the Insurance Commissioner of Michigan for a raise in premium rates, which raise met violent objections from various groups.

At the height of the publicity, the Governor appointed a Study Commission on Prepaid Hospital Care Plans, composed of representatives of almost all interested groups.

One of the Commission's first actions was to select as Study Director Dr. S. J. Axelrod of the Bureau of Public Health Economics, School of Public Health, University of Michigan. The MSMS Council objected to this appointment because "the publicly expressed opinion of the Bureau's Director (Nathan Sinai) and Assistant Director (S. J. Axelrod) over a number of years, concerning medical service, are at considerable variance with our nation's policy, and the views of the Michigan State Medical Society, and indicate certain preconceptions in this regard."

The Council felt that any such study should be undertaken by persons whose attitudes are completely objective and whose fields of competence extend to a greater variety of experience. The Society urged the Commission to have this survey made by a completely impartial group, to insure confidence and satisfaction among all segments of our citizens.

Some time after this protest, Dr. Axelrod resigned with the statement, as reported by the press: "The research program which was developed for the Commission requires the wholehearted co-operation on the part of the interested parties. It is quite clear that such co-operation will not be forthcoming, and under these conditions I feel that an effective research program cannot be carried out."

The resulting publicity pointed to the Michigan State Medical Society as objecting to the proposed study. However, this was not the case nor factual. The Council informed the Governor's Study Commission that MSMS favors an unbiased, authoritative, complete study of prepaid hospital care plans and of the costs of hospital care in Michigan generally, and that this has been the position of MSMS since the beginning of the work of the Governor's Study Commission, and it has not deviated from that position.

The Council's letter stated further that Dr. Axelrod's resignation removes the Society's concern that the proposed study would be placed in jeopardy. The Council's communication offered the Commission the Society's full co-operation and help in its work. (However, the Michigan State Medical Society fails to understand how unwarranted attacks in the press or elsewhere can aid such an official body in rendering assistance either to the public or the health groups, and the Commission should frown on such activity.)

Only the best equipped and most qualified (and completely impartial group or persons) should be called upon to undertake such an important study.

12. *Future Expansion of the Michigan State Medical Society.*—The present MSMS headquarters at 606 Townsend presently are adequate—but barely so. Future expansion will necessitate a larger and better functioning executive office. Such an MSMS building must be conducive to maximum business efficiency and be worthy of the Michigan State Medical Society, a headquarters of which the Michigan medical profession can well be proud! With this in mind, The Council has appointed a committee to investigate Lansing real estate for the purpose of purchasing an adequate site for MSMS, for future necessary expansion.

13. *Liaison Committee with Michigan Hospital Service.*—This Committee was reactivated during the past year at the specific request of Michigan Hospital Service made through personal invitation of its President, Mr. John W. Paynter. The personnel of this Committee are: W. S. Reveno, M.D., Detroit, Chairman; E. C. Baumgarten, M.D., Detroit; O. O. Beck, M.D., Birmingham; William Bromme, M.D., Detroit; C. W. Colwell, M.D., Flint; William LeFevre, M.D., Muskegon; J. D. Miller, M.D., Grand Rapids; R. L. Novy, M.D., Detroit; R. W. Shook, M.D., Kalamazoo; D. R. Smith, M.D., Iron Mountain; L. Fernald Foster, M.D., Bay City, Secretary.

This Committee will be advisory to Michigan Hospital Service in connection with any problems of a medical or professional character.

14. *M.D. Placement.*—The Michigan State Medical Society continued to work in co-operation with the Michigan Health Council in the M.D. Placement program. During the year seventy-seven placements were made, with thirty-two of them considered direct placements and forty-five indirect. Since the program began three years ago, 214 doctors have been placed. A total number of 150 Michigan communities are now listed with the Placement Service. There are 435 general practitioners and 255 specialists registered with the Service and seeking locations to practice.

As a new feature of the program, Michigan-born medical students who are graduated from out-of-state medical schools are contacted and urged to return to their home State to practice. This activity is meeting with some success.

15. *Matter Referred to the Council by the 1955 House of Delegates.*—The 1955 resolution re division of fees, Michigan Medical Service: The following report, adopted by the MSMS Study Committee on Fee Schedules for Michigan Medical Service, and approved by The Council, is respectfully submitted to the MSMS House of Delegates:

"Whereas, this Committee has given consideration to various programs or procedures for the accomplishment of the objectives of the resolution of the House of Delegates adopted September 26, 1955, re Division of Fees, and

"Whereas, this Committee has been charged with responsibility thereby for 'due consideration' of 'ethical, legal and administrative and other phases involved,' and *has given* due consideration thereto: therefore, be it

"Resolved: That the Committee reports to The Council as follows:

"(1) The Committee finds it impossible to determine a method of division of its scheduled fees for physicians by Michigan Medical Service as requested, which would be ethical, legal, and administratively feasible, and conform to opinions of the Judicial Council of the American Medical Association on the subject;

"(2) However, the Committee recommends that The Council request Michigan Medical Service to consider the inclusion in its subscribers' certificates of a benefit for the services of assistants in certain defined cases, and payment for such services directly to the asssitant."

16. *Annual Reports of Committees of the Council.* —Six additional reports have been submitted by Council committees since July 21 and are presented herewith as addenda for consideration of the reference committee. This will save reading them *in toto* to the entire House. These reports are from the following Committees: (a) Healing Arts Study Committee; (b) Mental Health Committee's Resolution re Psychotherapy; (c) Supplemental Report of Committee on Closed Panel Practice; (d) Supplemental Report of Committee on Michigan Medical Service; (e) Supplemental Report of Special Liaison Committee with Michigan Social Welfare Department, and (f) Committee on Rural Medical Service.

Mr. Speaker, if you or any member of the House of Delegates wishes these reports read word for word at this time, will you please instruct me?

The Speaker: That would be a lot of reading. I hear no objections to your omitting that, Dr. Wiley.

Recommendations

We respectfully invite to your attention the nine recommendations in the original Annual Report of The Council, printed in the Handbook on page 81. They read as follows:

(1) That the 1 per cent collection credit now granted to county medical societies be eliminated, inasmuch as all membership billing will be performed by the Michigan State Medical Society, and will relieve component society secretaries of this detail work.

(2) That The Council be authorized to send MSMS representatives to Washington, D. C., in 1957 on the occasion of the Annual Michigan Day.

(3) That contributions to the Beaumont Memorial Restoration Fund—by every individual MSMS member —be urgently recommended by the 1956 House of Delegates, and that a special letter campaign be conducted. Thus, every MSMS member will be invited to contribute with pride to the Beaumont Memorial—which will represent for generations the best type of public relations for the entire medical profession in this State.

Further, that the following recommendation of the Beaumont Memorial Committee be given serious and favorable consideration by the House of Delegates: Recognizing that sustained effort is vital, a Beaumont Memorial Foundation be created immediately to further the purposes and continuing needs of the Beaumont Shrine at Mackinac Island, that every MSMS member be notified he is not only eligible to join at an annual membership fee to be established, but that he is invited and urged to join.

(4) That the House of Delegates instruct The Council whether or not the Uniform Fee Schedule for Governmental Agencies should be restudied and revised before necessary reprinting.

(5) That the recommendation of the Committee on Mediation, Ethics and Grievance be given serious consideration at this session by the House of Delegates. (These include proposed Bylaws changes in Chapters 6, 7 and 10). See Annual Report of this Committee for background and explanation showing need for these Bylaws amendments.

(6) That medical men become increasingly active in civic affairs, assuming the opportunities and obligations of their standing as leading citizens, to the end that public opinion generally is continued favorable to a maintenance of the present high standards of public health and medical education and service. This best is accomplished on the local level through active membership by doctors of medicine in chambers of commerce, health councils, and other reputable community and civic organizations.

(7) That members of the MSMS House of Delegates, as the natural leaders in their medical areas, express pride before their confreres in the excellent MSMS health and accident insurance program (Provident Life and Accident Insurance Company) so that during the ensuing Society year a substantial majority of members is enrolled in this protective device.

(8) That the following amendments to the Constitution and Bylaws be considered by the 1956 House of Delegates:

(a) Amend the Constitution in Article X, Section 3, so that the Vice Speaker of the House of Delegates is made a member of The Council and of its Executive Committee, with power to vote. (Also amend the Bylaws, Chapter 11, Section 10.)

(b) Amend the Bylaws in Chapter 8, Section 10-d to specify that AMA delegates and alternate delegates shall take office on January 1 following their election in September.

(c) Amend the Bylaws (Chapter 11, Section 4) so that all county medical societies in a councilor district first shall be contacted for approval of proposed appointment of a Councilor by the President, in case of resignation of a Councilor.

(9) That the House of Delegates eliminate the present assessment and authorize in lieu thereof an increase in dues adequate for the maintenance of our modern Society program and to insure reserves necessary to meet a major emergency.

In this Supplemental Report, The Council wishes to strengthen its recommendation No. 9—the need for building a needed surplus through a *permanent* dues increase. Not only must we consider expansion of MSMS services and the need for an adequate building, but reserves are required to meet a major emergency which may strike the medical profession "sooner than you think." To refresh your memories: When the Truman Socialized Medicine Plan hit us in 1948. we were fortunate to have reserves on hand of some $100,000, all of which and more were needed to fight and win that major battle. As of September 1, 1956 our public relations reserves are only $56,958.75. The Council judges this sum to be totally inadequate in the face of a major threat, and recommends that no less than $400,000 be set aside as a surplus (a) for the MSMS building, and (b) for emergency purposes. "Plan and work today for tomorrow" is advice good not only for the individual physician but for his medical organization as well.

The Council respectfully submits two additional recommendations:

(10) That the House of Delegates give favorable consideration to the following proposal: Since the work of the Michigan State Board of Registration in Medicine is much more time-consuming than heretofore, and is daily increasing in importance, the Michigan State Medical Society respectfully requests the Michigan legislature to make the office of Executive Secretary of the Michigan State Board of Registration in Medicine a full-time position; and that said Secretary be paid a salary commensurate with the importance and volume of his work.

(11) That in connection with the important subject of practice of psychotherapy, action similar to that taken by the Washtenaw County Medical Society (see addenda) be favorably considered by the House of Delegates, and further that the Michigan State Board

of Registration in Medicine be requested to institute proceedings or a test case against such violations of the Michigan Medical Practice Act.

Finally, The Council again asks the House of Delegates the question posed in its printed Annual Report (see page 55 of Report): Shall MSMS favor or be opposed to annual registration of doctors of medicine?

This report is respectfully submitted by The Council of the Michigan State Medical Society.

* * *

The Annual Report of The Council and all addenda were referred to the Reference Committee on Reports of The Council.

V. REPORT OF DELEGATES TO AMA

By W. A. Hyland, M.D.

It is customary to read our report. This year it is printed in the Handbook on pages 84 to 94 inclusive, so we will not go into that.

I would like to take a few moments to discuss the AMA with you, and also following that I would like to show a movie of the progress of the AMA and what it is doing for you.

This movie was prepared by the AMA Public Relations committee, to be sent out to all county societies in the country. This is the first time it will be shown, and it is in deference to the Public Relations Committee of the Michigan State Medical Society, which is so highly regarded by the American Medical Association; in fact, they make no bones about saying it is the top Public Relations Committee in the country.

I would like to say a few other things about the American Medical Association. The American Medical Association is a unique organization. It is a focal point for the world-wide exchange of scientific ideas. It is a protector of the nation's health. It is a tireless campaigner for a better America. But most of all, the American Medical Association is the doctors of America—145,000 medical men banded together to accomplish common goals.

As a dues-paying member of his county and state society and of the American Medical Association, each doctor has a voice in the American Medical Association's far-reaching activities. He contributes to a never-ceasing effort to improve the practice of medicine throughout the nation.

Occasionally, one hears among the profession the criticism that the AMA is a giant bureaucratic corporation with dictatorial powers; that all decisions affecting the state and county units, and thereby the individual doctor, are made within a tight little group who keeps that power and control unto themselves; that it has developed into a gigantic political lobby and collects excessive dues from its members, from which somebody within benefits.

This is a near-verbatim statement taken from a conversation between two doctors who evidently do not belong to the AMA but enjoy the protection and advantages it offers to all physicians, just as the unvaccinated child enjoys protection against small pox because so many people are vaccinated that an epidemic cannot occur. Both the medical opponents of the AMA and the lay opponents of vaccination are either unwilling or incapable, because of prejudice, to approach the matter with an open mind and assess all of the facts.

It is true the AMA is a mighty and powerful organization. If it were not, it would be of little value to the profession and equally valueless in protecting the public welfare. I could not begin even to mention all of the important functions of the AMA and how they are related to the profession and the public welfare, but two or three examples might be worth mentioning.

As a policy-making organization, the AMA has wielded a powerful influence in the field of medical education. In conjunction with the Association of American Medical College's inspection and rating, some 350 medical schools giving M.D. degrees were classified. Within a few years the number had decreased to one-third by eliminating the diploma mills and the very substandard school that either could not get students or whose graduates could not attain recognition by state licensing boards.

At the present time there are eighty-one recognized ("A" rating) medical schools, all giving high standard courses. It is true some of these substandard schools have been replaced by cultist schools over which the AMA has no control, but they cannot give an M.D. degree.

After graduation the AMA directs, through the state and county units, the ethical and moral conduct of its members in their relationship with each other and with the public. Without a powerful central organization there could be no assurance of uniformity of such codes of ethics. While most doctors need little disciplining, we do all need to know the rules, and there are a few "moths in our midst" to damage the whole fabric if they are not kept under control.

Day in and day out, nine standing councils, six standing committees—plus special departments and bureaus —work tirelessly at AMA headquarters to benefit both physicians and their patients.

The work of just one Council—the Council of Medical Education and Hospitals—has been credited with raising (as previously mentioned) the standards of medical education in the United States to the point where it is now the best in the world.

Activities of another representative Council—the Council on Pharmacy and Chemistry—are invaluable to each doctor-member of the AMA.

No one physician or group of physicians could possibly keep informed on relative merits of the hundreds of drugs put on the market annually by pharmaceutical companies. Backed by the total membership of the American Medical Association, the Council on Pharmacy and Chemistry does this job for each individual doctor.

The Council reports on the status of medicine, directs research and protects the profession and the general public against quackery, fraud, undesirable secrecy and objectionable advertising in connection with proprietary medicine.

In addition to directing such continuing activities, the American Medical Association's House of Delegates, through its Board of Trustees, meets other challenges as they arise.

An important function of the AMA is to keep a sharp and watchful eye on national legislation that might affect the profession and the public. Every bill that could effect the public health is carefully scrutinized, whether it has direct implications or not, and weekly (or oftener) reported to the state associations. Course of action to take in case of undesirable legislation is outlined, and concerted effort is the result. Through the efficient functioning of the AMA up to this time, the line has been held and we have been spared what might have been disaster.

When government-controlled medicine threatened, the profession united to educate the public on advantages of the voluntary system.

Through the organization of the American Medical Education Foundation the AMA has undertaken the deficit financing of the medical school which amounts to 10 million dollars this year. Out of their income (dues) the AMA has been contributing $500,000 a year. This does not sound like a waste of money. The profession is asked to contribute 2 million dollars.

It is my feeling that the AMA operates as democratically as a large central organization of its kind can. All important decisions are made by the House of Delegates by rank-and-file doctors representing each state. They are not "yes" men, and I have witnessed them thunder down resolutions or committee recommendations not to their liking.

I am very much opposed to regimentation, but I am just as strongly in favor of good organization; and, with all of its faults, I think the AMA falls in the latter category.

During its more than 100 years of existence the American Medical Association has dedicated itself to the betterment of medicine. In years to come, the American Medical Association will continue to function as its members dictate, to protect public health and to serve where service is needed.

I would like to read to you an editorial in a western newspaper, entitled, "Doctors' Ethics":

"A move is under way to shorten, and sharpen, the official Code of Ethics that guides the American Medical Association.

"Condensed from a sizable and admittedly verbose booklet, a concise statement of one page has been prepared for the Association's approval at its Seattle convention next December.

"Its very first declaration, in effect, defines the whole:

" 'The prime objective of the medical profession is to render service to humanity.'

"This sentence embraces the ideals and purposes of medicine since the time of Hippocrates and Galen.

"It is often valuable for doctors, no less than lawyers and clergymen, to have professional manifestos giving in detail their rules of conduct.

"Still more valuable is a moral atmosphere created silently and unobtrusively and, in America particularly, permeating the profession with a sense of dedication to the welfare of humanity.

"It can be said that no other profession has so cheerfully accepted the arduous toil, interminable hours and delayed economic benefits that doctors take as a matter of course.

"This can be expressed as a policy in a formal Code of Ethics, but it becomes a daily fact and practice only when practitioners adopt it as a natural viewpoint and manner of life implicit in our mission.

"We doctors have done that, to our honor and benefit."

Another thing the American Medical Association is concerned about and cannot do too much about as an organization because we feel we are not the ones to start it, is a study of income tax reduction. This is quite uppermost in the minds of the Board of Trustees, but they feel the doctors are not the ones to initiate this. However, they would like all of you as individuals to contact your legislators in Washington, urging them to have a study committee and to continue with the idea of reducing income taxes somewhat.

It is the feeling that at least 8½ billion dollars in taxes could be reduced with a little more care in Washington. The AMA is very much concerned about that.

The American Medical Association has two or three men in line for President: Gunnar Gundersen, Chairman of the Board of Trustees; Lois Orr, and Fritz Nassey, the Speaker and Vice Speaker. I think Dr. Orr and Dr. Gundersen will be up for election next year. Dr. Gundersen is from Wisconsin, our next door neighbor. Dr. Orr is a very good friend of all of us, and it will be interesting to see how they work it out.

I want particularly to thank all the members of the House of Delegates Committee—Drs. Barrett, DeTar, Huron, Novy, Penberthy, Owen, and so on, for all their loyal support, and the officers and public relations and legal counsel who have been of so much help to us.

If you will bear with me for a few minutes, I would like to have you review this motion picture with me and see what you think about it. You will probably gain something from it. I did.

The AMA Delegates' report was referred to the Reference Committee on Officers' Reports.

VI. REPORT OF WOMAN'S AUXILIARY TO MSMS

By Mrs. Rita McGregor, President

The Woman's Auxiliary to the Michigan State Medical Society this year holds its thirtieth annual meeting, a time when reports to be given will note the outstanding progress made by the Auxiliary during the past year. Michigan has had a good year—a stimulating and enlightening year—and, above all, one of excellent co-operation and combined efforts.

The list of our accomplishments is a long one. Each auxiliary has in some way done outstanding work and has contributed greatly to the projects of the state and national auxiliary. It is regrettable that each cannot be cited separately, but I would like to mention a few of the highlights.

Forty-seven organized auxiliaries, with Northern Michigan reorganizing this year, brings our membership to 3,063, with 261 new members. We are not as yet 100 per cent in membership, but we are progressing closer to that goal.

The sum of $3,200 was contributed to the American Medical Education Foundation, an increase of over 23 per cent, and better than $1.14 average per member —good evidence that the tireless efforts of our Chairman, Mrs. Victor Zerbi, have paid off. In addition, Michigan was among the top ten states in the eighty Dimes Campaign, with a contribution of $665.50.

Today's Health.—Subscriptions reached 88 per cent of our State quota (with 2,453 11/12 credits), an increase of 13 per cent. Fourteen auxiliaries reached 100 per cent or better; and Mason County, with a membership of nine, reached the almost unbelievable heights of 1,922 per cent—receiving second prize nationally in the 1955-1956 subscription contest. Michigan also was honored at the Second Annual *Today's Health* Breakfast held in Chicago during the convention in June.

Nurse recruitment takes top billing with all our auxiliaries, each participating in some way in this project. $11,349.73 was spent for recruitment activities, with $486.08 for Future Nurse Clubs, $3,538.65 for loans, and $7,325 for scholarships. This was an increase of 28 per cent, or an increase of over $2,500 over last year.

Many auxiliaries have shown interest in the allied fields as well. 3,465 students from eighty-seven schools, scattered over forty counties, participated in the Annual Tuberculosis Speaking Contest, a project sponsored jointly by the Michigan Tuberculosis Association and the Woman's Auxiliary. One hundred sixty talks were submitted for State judging. Students spoke to school and community audiences, totaling about 13,115, with forty local radio programs arranged by schools or local county auxiliaries, an excellent example of good public relations.

Each auxiliary is definitely aware of the importance of public relations, and contributes effectively. It would be ideal if each project could be mentioned, but the list is a long one—with assistance given at health days and fairs, to health councils, to schools on various phases of a health program, to hospitals and hospital auxiliaries, to sanatoria, to mention only a few.

A survey of the various volunteer services (in addition to those given in medical fields) such as Red Cross, Community Chest drives, PTA, Girl and Boy Scouts, cancer and polio drives, church activities, Junior League, AAUW, and so on, given by doctors' wives in their respective communities, revealed an average effort, by conservative estimate, of thirty-five hours per member per month. Again, evidence that doctors' wives more than carry their share of responsibility in their respective communities.

Emphasis was placed on a public relations meeting

to which guests from other organizations and/or the public at large were invited, with gratifying results. An outstanding program, held by the Woman's Auxiliary to the Saginaw County Medical Society, was an open meeting on "Doctor-Patient Relationship"—a panel discussion featuring an attorney as moderator. The medical society was represented by the president of the society, by a surgeon, and a general practitioner. Representing the general public were a news feature writer and a personnel manager. A lively and interesting discussion developed on such subjects as doctors' fees, willingness to make house calls, and so on.

Twelve auxiliaries have had joint meetings with allied groups, and two auxiliaries entertained the wives of senior medical students.

The auxiliaries responded quickly to the request of the MSMS to send letters and telegrams against bill HR 7225; and, although the bill was not defeated, it signified the interest and diligence of the members. The members have worked hard in the past on a "Get-Out-The-Vote" campaign, and this same enthusiasm again will be evidenced this fall.

Increased interest in civil defense; mental health and safety has been shown, many auxiliaries having programs devoted to these subjects.

There are many more accomplishments, but suffice it to say that Michigan has had a good year and has earned, by its outstanding activities, an enviable record among the state auxiliaries—a record of which we are all proud.

The Woman's Auxiliary is grateful for all the assistance, financial and otherwise, given to it by the Michigan State Medical Society, and in turn stands ready at all times to help further the aims, objectives and purpose of its parent organization.

At this time may I express my personal and sincere appreciation for the assistance and guidance given by the MSMS—by Dr. Jones, the MSMS President; by the Advisory Committee and Dr. Livesay as Chairman; by The Council; by Mr. Burns, Mr. Brenneman, Mr. Brewer, and the office staff. Such help has often made the going easier for me.

It has been a pleasure and an honor to serve as president of so fine an organization as the Woman's Auxiliary to the Michigan State Medical Society, and I am grateful for having had the opportunity.

* * *

The Woman's Auxiliary report was referred to the Reference Committee on Officers' Reports.

VII. REPORT OF MICHIGAN STATE MEDICAL ASSISTANTS

By Miss Hallie Cummins, President

During the past year representatives of the Michigan State Medical Assistants Society attended the County Secretaries' Public Relations Conference, the Michigan Clinical Institute, a reception honoring the wives of the Michigan State Legislature by the Ingham County Woman's Auxiliary, the Michigan Health Council, and the Michigan Rural Health Conference.

Representatives, together with Dr. Ralph W. Shook, Vice Chairman of the Advisory Committee, attended the organizational meeting of the American Association of Medical Assistants in Kansas City. The valuable advice of Dr. Shook was of considerable assistance at this meeting.

Two Presidents' Conferences were held. Speakers from the State Medical Society and the Woman's Auxiliary, as well as the American Medical Association, presented subjects of much interest and importance to the officers and committee chairmen of the component societies who attend the conference.

We were privileged to hold an organizational meeting of the Upper Peninsula Medical Assistants during the annual meeting of the Upper Peninsula Medical Society. Again, speakers from the Michigan State Medical Society contributed their time and talents to help make this meeting a success. The courtesy and kindness shown us by the Upper Peninsula Medical Society and the Woman's Auxiliary is very much appreciated.

The number of our component societies still stands at sixteen, with one small Upper Peninsula society disbanding and replaced by the entire Upper Peninsula as a component society.

At this time our membership numbers 803—569 old members and 234 new. It is felt that there is considerable interest in our Society, since more and more inquiries regarding it are being received. We believe a great deal is to be gained by the medical assistant who affiliates with our Society.

We very much appreciate the honor and privilege of being able to hold our annual meeting in conjunction with the annual meeting of the Michigan State Medical Society. We are grateful for the space given us in the the JOURNAL, and for the programs which are printed and mailed to the doctors throughout the State each year.

Our meeting is being held at the Detroit-Leland Hotel on Wednesday and Thursday of this week. We would consider it an honor to have you attend any of our lectures which may be of interest to you.

* * *

The report of Michigan State Medical Assistants Society was referred to the Reference Committee on Officers' Reports.

VIII. SELECTION OF MICHIGAN'S FOREMOST FAMILY PHYSICIAN

By L. Fernald Foster, M.D., Secretary

An unusual situation presents itself this year on this occasion of the Foremost Family Physician Award. Due to the untimely passing of one of the men who had been nominated, this doctor's name had already been presented and the brochure on him completed. It is a most beautiful thing, a bound volume with all of the data and information about this man. He died in June after his Society had decided to present his name. I want to read to you the action of The Council bearing on this subject.

An excerpt from the minutes of The Council at the July 19-20-21 meeting relative to nominations for Michigan's Foremost Family Physician is as follows:

"That The Council recommends to the 1956 House of Delegates that two Michigan's Foremost Family Physician Awards be issued this year, one to J. H. Sherk, M.D., of Midland, posthumously, and one to a living doctor, said doctor to be chosen in the usual fashion."

The second motion was to the effect "That The Council submit the names of Paul Van Riper, M.D., Champion, from the Marquette-Alger County Medical Society; Ralph G. Cook, M.D., Kalamazoo; and Henry Meyer, M.D., Saginaw, to the House of Delegates as nominees for Michigan's Foremost Family Physician." (The portfolios on the three nominees were read.)

IX. FIFTY-YEAR AWARDS

THE SPEAKER: At this time we have a very pleasant duty to perform, and that is to honor the men who have been in practice fifty years. The Secretary has the certified list of these names, and as he calls their name will they please come to the front and receive their pin from President Jones.

The following doctors received their Fifty-Year Award from President Jones:

Ernest G. Bellinger, M.D., Lansing
Alexander W. Blain, M.D., Detroit
Phillip D. Bourland, M.D., Calumet
William DeKleine, M.D., Lansing
Lucius A. Farnham, M.D., Pontiac
Joshua Hanser, M.D., Detroit
Lemen L. Harrison, M.D., Niles
Wilfrid Haughey, M.D., Battle Creek
Edward V. Howlett, M.D., Pontiac
John W. Orr, M.D., Fenton
Melvin D. Roberts, M.D., Hancock
Frank J. Sladen, M.D., Detroit
Claude A. Smith, M.D., Dearborn
Clarence T. Starker, M.D., Pontiac
Thomas C. Starrs, M.D., Detroit
S. W. Thieme, M.D., Ravenna

(The meeting was recessed at 12:45 p.m.)

MONDAY AFTERNOON SESSION

September 24, 1956

The meeting reconvened at 2:15 p.m., J. E. Livesay, M.D., Speaker of the House, presiding.

X. RESOLUTIONS AND MOTIONS

X—1. COMPREHENSIVE PREPAID MEDICAL CARE INSURANCE PLAN

M. L. Lichter, M.D.:

"Whereas, it is the proper role of medicine to assume leadership in determining the type and form of prepaid medical care plans, and

"Whereas, a prepaid medical care plan ideally should embody within it a sense of mutual responsibility on the part of the physician and on the part of the patient, and

"Whereas, a medical care plan should preserve the traditional right of the patient to select the physician of his own choosing; therefore, be it

"RESOLVED: That the Michigan State Medical Society endorse the principle of a comprehensive prepaid medical care insurance plan to be developed with the Michigan Medical Service and implemented through a deductible and co-insurance contract; and be it further

"RESOLVED: That the Speaker of this House of Delegates be authorized to appoint forthwith a special committee to accomplish the following:

"(a) Meet with the representatives of Michigan Medical Service to develop details and mechanisms for implementing the enunciated principle.

"(b) Initiate, as a joint endeavor and in co-operation with Michigan Medical Service, necessary studies to ascertain what would best serve the public.

"(c) Prepare a complete report for presentation to the House of Delegates at its meeting in 1957 with the proviso that copies of this report shall be sent to each member of the House of Delegates by August 15, 1957."

This resolution was referred to the Reference Committee on Medical Service and Prepayment Insurance.

X—2. MMS ANNUAL REPORT TO MSMS HOUSE OF DELEGATES

J. B. Blodgett, M.D.:

"Whereas, the Michigan State Medical Society established Michigan Medical Service with the intent of providing medical services on a voluntary basis through a prepayment plan, and

"Whereas, the expansion of Michigan Medical Service has become a significant factor in the practice of medicine in the State of Michigan, and

"Whereas, there is no direct liaison between Michigan Medical Service and the House of Delegates of the Michigan State Medical Society, which is the broad base representative of the practicing profession in Michigan; now be it.

"RESOLVED: That the Directors of Michigan Medical Service be requested to report annually to the House of Delegates of the Michigan State Medical Society on its programs, problems, and its philosophy."

This resolution was referred to the Reference Committee on Medical Service and Prepayment Plans.

X—3. HONORARY MEMBERSHIP TO DEAN GORDON H. SCOTT

E. A. Osius, M.D.:

"Whereas, Dr. Gordon H. Scott is Dean of the Wayne State University Medical School, the large majority of whose graduates practice in the State of Michigan, and

"Whereas, Dr. Scott has improved the quality of medical education by his participation in the educational activities of his County and State Societies and by his close and harmonious relationship with the profession, and

"Whereas, through his leadership and his untiring efforts he has expanded the facilities of the Wayne State Medical School and has promoted the development of a medical center in that area, and

"Whereas, one of the fundamental purposes of the Michigan State Medical Society is improving medical education and maintaining it at the highest possible level; therefore, be it

"RESOLVED: That in appreciation of his services to medical education in the State of Michigan, that Dr. Gordon H. Scott be elected an Honorary Member of the Michigan State Medical Society."

This resolution was referred to the Reference Committee on Special Memberships.

X—4. POSTGRADUATE EDUCATION OF OTHER HEALING ARTS

R. W. Teed, M.D.:

"Whereas, osteopaths in Michigan are currently furnishing approximately 25 per cent of the medical service for the people of Michigan, and

"Whereas, in certain communities in Michigan they furnish from 50 to 100 per cent of such service, and

"Whereas, it is incumbent on the medical profession to improve the quality of education and medical care given by these practitioners in the public interest; therefore, be it

"RESOLVED: That the House of Delegates of the Michigan State Medical Society approve the majority findings of the AMA committee for the study of relations between osteopathy and medicine, to the effect that current education in colleges of osteopathy does not constitute the teaching of 'cultist' healing; and be it further

"RESOLVED: That the House declare its policy to be to encourage doctors of medicine to assist in osteopathic undergraduate and postgraduate medical educational programs; and be it further

"RESOLVED: That the Michigan State Medical Society and its component county societies be permitted to invite osteopaths to their scientific programs."

This was referred to the Reference Committee on Resolutions.

X—5. PRACTICE OF PSYCHOTHERAPY

P. S. Barker, M.D.:

"Whereas, the practice of psychotherapy as commonly understood has as its primary objective the diagnosis and relief of human ailments of mental origin, and

"Whereas, the interrelationships between ailments having a physical origin and those having a mental origin are extremely complex and can be diagnosed,

understood, and treated only by those having the training and experience of a duly licensed physician, and

"Whereas, the health and welfare of the people of Michigan and the County of Washtenaw would be jeopardized if such diagnosis and treatment were placed in the hands of other than licensed physicians, and

"Whereas, Opinion No. 2359 of Attorney General Thomas M. Kavanaugh seems to ignore the wording of the Medical Practice Act, which specifically includes ailments or complaints of mental origin as well as those of physical origin in its definition of medical practice, and

"Whereas, this opinion has been interpreted by certain psychologists and social workers as giving legal sanction to the diagnosis and treatment of mental disorder by those not licensed to practice medicine; therefore, be it

"RESOLVED: That the Michigan State Medical Society affirm its stand that the practice of psychotherapy constitutes the practice of medicine, and that Opinion No. 2359 of the Attorney General concerning the practice of psychotherapeutics is contrary to the public interest and should be revoked; and be it further

(See amendment of Reference Committee, page 203).

"RESOLVED: That copies of this resolution be sent to the Governor and Attorney General of the State of Michigan as well as to the officers of The Council of the Michigan State Medical Society to inform them of our stand on this matter."

This was referred to the Reference Committee on Legislation and Public Relations.

X—6. MSMS ATTITUDE RE OTHER HEALING ARTS

C. K. Stroup, M.D.:

"Whereas, some expression of reappraisal of our position with regard to osteopaths and their organization has been sought in some quarters; therefore, be it

"RESOLVED: That the Michigan State Medical Society maintain its present position in regard to osteopaths and osteopathy in accordance with the policy of the American Medical Association in recognizing them as substandard healers and unethical colleagues of doctors of medicine."

This was referred to the Reference Committee on Resolutions.

X—7. COUNCIL MINUTES TO ALL MSMS DELEGATES

F. D. Johnson, M.D.:

"Whereas, the House of Delegates is the governing body of the Michigan State Medical Society, and

"Whereas, The Council and its Executive Committee act for the Society and the House of Delegates throughout the year, and

"Whereas, the delegates meet once a year and review the work of The Council, and

"Whereas, the excerpts of Council activity as printed in the JOURNAL are fragmentary and incomplete, and

"Whereas, the work of the Society is too voluminous to permit accurate appraisal of all facets of our programs during one yearly meeting; therefore, be it

"RESOLVED: That the minutes of meetings of The Council and its Executive Committee be mailed to all delegates of the Michigan State Medical Society shortly after meetings are held."

This was referred to the Reference Committee on Resolutions.

X—8. ESTEEM OF HOUSE OF DELEGATES FOR THE LATE J. JOSEPH HERBERT

F. J. Busch, M.D.:

"Whereas, the medical profession of Michigan for the past twelve years has received the wise and able counsel of a distinguished lawyer and citizen, and

"Whereas, that valued service was rendered in a gracious, dignified and devoted manner by Mr. J. Joseph Herbert, Legal Counsel of the Michigan State Medical Society, who passed away on July 28, 1956, and

"Whereas, Mr. Herbert so lived that his memory will always remain a friendly, guiding light in our hearts and minds; therefore, be it

"RESOLVED: That the House of Delegates of the Michigan State Medical Society and its several members forever keep in the annals of the medical profession of Michigan this expression of our highest esteem and admiration for Mr. Herbert; and be it further

"RESOLVED: That his widow, Mrs. Imogene Herbert, and his family be supplied with a copy of this resolution so that they will know that we join with them in honoring his memory."

This resolution was referred to the Reference Committee on Miscellaneous Business.

X—9 (ByLaws, Chap. 8—Sec. 10-g)—PROCEDURE IN CASE OF VACANCY ON COUNCIL

D. R. Smith, M.D.:

"Whereas, a vacancy on The Council may occur during the year other than at the time of the Annual Session, and

"Whereas, the Bylaws provide for this possibility only through the general power of a Presidential appointment to fill the vacancy; therefore, be it

"RESOLVED: That the following paragraph be incorporated into the Bylaws as the last paragraph of (g), Section 10, Chapter 8: 'If a vacancy occurs on The Council other than at the time of the Annual Session, all the component societies in the affected Councilor District shall be notified of the vacancy, and their recommendation as to a successor shall be sought. After receipt of these recommendations, the President of the MSMS shall appoint a successor to fill the unexpired term.' "—(Amended by Reference Committee)

This resolution was referred to the Reference Committee on Constitution and Bylaws.

X—10. REPORT WITHIN SEVEN DAYS OF HOUSE OF DELEGATE PROCEEDINGS

A. C. Stander, M.D.:

"Whereas, a summary of the proceedings of the House of Delegates is annually formulated, and

"Whereas, copies of resolutions are only made available to reference committees so that in debate on the floor of the House confusion may or has existed as to the wording of these resolutions, and

"Whereas, the Michigan State Medical Society has apparently adequate staff available; be it therefore

"RESOLVED: That a copy of all resolutions and other pertinent information of each previous meeting be available in mimeographed form at the beginning of the next meeting; and be it further

"RESOLVED: That a copy of the transactions of the House of Delegates be mailed to each delegate within a week after the annual House of Delegates meeting so he may have an early and accurate and complete report to present to his constituents."

This was referred to the Reference Committee on Resolutions.

X—11. CONTINUATION OF COUNCILOR CONFERENCES

F. C. Ryan, M.D.:

"Whereas, it is to the better interest of the Michigan State Medical Society for its delegates to be fully informed of the current business of the Society prior to the Annual Meeting of the House of Delegates, and

"Whereas, this purpose may be usefully served by informal meetings in the several Councilor Districts of its delegates and officers from the component societies, with the Councilor of the district and a representative from the Executive Committee of The Council; therefore, be it

"RESOLVED: That the House of Delegates authorize The Council of the Michigan State Medical Society to organize such meetings in the several Councilor Districts as may be appropriate and feasible prior to the Annual Meeting of the House of Delegates."

This was referred to the Reference Committee on Resolutions.

X—12. EXPANSION OF MEDICAL SCHOOL FACILITIES AT WAYNE STATE UNIVERSITY

W. S. Reveno, M.D.:

"Whereas, it is well recognized that a shortage of physicians' services still exists in Michigan, and

"Whereas, the number of qualified applicants for medical education exceeds the facilities for such education in our State, and

"Whereas, the physical equipment at Wayne State University College of Medicine reportedly is sufficient to allow the admission of fifty more first-year students each year, and

"Whereas, Wayne State University College of Medicine lacks sufficient funds to furnish teaching personnel necessary for this expansion of its enrollment; therefore, be it

"RESOLVED: That the House of Delegates of the Michigan State Medical Society respectfully requests the Legislature of the State of Michigan to increase its appropriation to Wayne State University College of Medicine by a sufficient amount to allow the expansion."

This was referred to the Reference Committee on Legislation and Public Relations.

X—13. ESTABLISHMENT OF DEPARTMENTS OF GENERAL PRACTICE IN MEDICAL SCHOOLS

R. F. Fenton, M.D.:

"Whereas, there has been a declining proportion of medical graduates going into general practice, and

"Whereas, the medical student is not now exposed to the various requirements of general practice because of the fact that all his instructors are those limiting their practice to the various specialties, and

"Whereas, the modern generalist requires training in the art of medicine as well as the scientific approach, more knowledge of preventive medicine, physiotherapy, family counseling, medical and social economics and public relations in general, and

"Whereas, the House of Delegates of the American Medical Association has passed a resolution requesting that medical schools add a Department of General Practice to their curriculum; therefore, be it

"RESOLVED: That the House of Delegates of the Michigan State Medical Society request the University of Michigan and the Wayne State Medical College to add a Department of General Practice to their curriculum."

This was referred to the Reference Committee on Resolutions.

X—14. DEFERRING ACTION RE DISCIPLINE OF MEMBERS

M. R. Weed, M.D.:

"Whereas, the Michigan State Medical Society has proposed amendments to its Bylaws which will radically alter the procedures of disciplining its members, and

"Whereas, these proposed Bylaw amendments will require changes in the present procedures of the county medical societies which vary considerably from each other because of difference in size and location; therefore, be it

"RESOLVED: That action on these proposed amendments be deferred so that each component county society may have an opportunity to recommend such changes as will reflect its experiences and fulfill its needs."

This was referred to the Reference Committee on Constitution and Bylaws.

X—15. STATE AND COUNTY PREROGATIVES RE DISCIPLINE OF MEMBERS

L. J. Bailey, M.D.:

"Whereas, at the 1956 session of the House of Delegates of the Michigan State Medical Society certain changes to Chapter 6 of the Bylaws, entitled 'Discipline of Members,' will be proposed, and

"Whereas, the constituent county societies should be allowed local autonomy in matters dealt with in these proposals, and

"Whereas, rules set down in detail may not apply equally well to all county societies, and

"Whereas, the ends of justice are fully met if procedures in disciplinary actions are fair; therefore, be it

"RESOLVED: That Section 1, Chapter 6 of the present Bylaws of the Michigan State Medical Society be retained, wherein it states, 'A component county society may expel, suspend or otherwise discipline any of its members in accordance with the provisions of its Constitution and Bylaws'; and be it further

"RESOLVED: That the county societies not be held to specific provisions in disciplinary actions except in matters pertaining to appeal, provided that the Bylaws of the component societies not be in contravention to those of the Michigan State Medical Society; and be it finally

"RESOLVED: That the Committee on Constitution and Bylaws be instructed, in its study of the proposed changes, to provide that the wording of such changes be sufficiently broad to permit of the implementation of acceptable details at the county level."

This was referred to the Reference Committee on Constitution and Bylaws.

X—16. MSMS APPROVAL OF COUNTY SOCIETY CONSTITUTION AND BYLAWS REVISIONS

L. J. Bailey, M.D.:

"Whereas, at the time of the chartering of component county societies the constitution and bylaws of such societies are approved by the chartering body, and

"Whereas, the constitution and bylaws of the county societies are subject to subsequent amendments and revision, and

"Whereas, approval of such amendments and revisions are not now provided for in the Constitution and Bylaws of the Michigan State Medical Society, and

"Whereas, such approval before final adoption would insure the continued adherence of the constituent societies to the provision of Section 1, Chapter 1 of the Bylaws of the Michigan State Medical Society, which states in part, 'The constitution and bylaws of the component county societies shall in no way be inconsistent with the Constitution and Bylaws of the Michigan State Medical Society'; therefore, be it

"RESOLVED: That the Committee on Constitution and Bylaws be requested to consider the attached draft which is an addition to the Bylaws requiring that all amendments to the constitution and bylaws of the component county societies be submitted for approval to The Council of the Michigan State Medical Society before final adoption."

This was referred to the Reference Committee on Constitution and Bylaws.

X—17. EQUAL HEALTH OPPORTUNITIES FOR ALL

L. R. Leader, M.D.:

"Whereas, the health opportunities of the community are our basic concern, and

"Whereas, restriction or denial of health services and facilities because of race, creed, or color violates the spirit of our ethical code; therefore, be it

"RESOLVED: That the Michigan State Medical Society record itself as favoring equal health opportunities for all."

This was referred to the Reference Committee on Resolutions.

X—18. (ByLaws, Chapter 2, Section 2)—RE MEMBERSHIP IN COUNTY OF PRACTICE

Sydney Scher, M.D.:

"Whereas, the Bylaws of the Michigan State Medical Society do not definitely state that a doctor of medicine is expected to become a member of the component society of the county in which his office is located, and

"Whereas, Chapter 2, Section 2 of the Bylaws of the Michigan State Medical Society, which provides for an exception, implies that a doctor of medicine is expected to hold his membership in the component society of the county in which his office is located, and

"Whereas, Chapter 2. Section 3 of the Bylaws of the Michigan State Medical Society states that each component county society shall have general direction of the affairs of the profession in the county and shall exert its influence for bettering the scientific, moral and material conditions of every doctor of medicine in the county, and

"Whereas, a component county society is unable to exert its influence to the fullest degree for the betterment of the practice of medicine in the county unless all eligible doctors of medicine practicing in the county are members, and

"Whereas, Chapter 2. Section 3 of the Bylaws of the Michigan State Medical Society urges each component county society to increase its membership until it embraces every eligible doctor of medicine in the county, and

"Whereas, Chapter 4 of the Bylaws of the Michigan State Medical Society provides for the transfer of membership from one component county society to another upon the change of location; therefore, be it

"RESOLVED: That Chapter 2, Section 2 of the Bylaws of the Michigan State Medical Society be changed to read as follows: 'A doctor of medicine must hold his active membership in the component society of the county in which his office is located. In the event the doctor's office is near a county line, he may be granted membership in a neighboring component county society on permission of The Council of the Michigan State Medical Society and on permission of the county society to which he would ordinarily belong under the provisions of this Section.' "

This was referred to the Reference Committee on Constitution and Bylaws.

X—19. COMMITTEE TO STUDY USE OF WORD "CLINIC"

P. S. Sloan, M.D.:

"Whereas, during the last decade we have seen many changes in medical practice, such as the growth of groups, partnerships, clinics and medical centers, and

"Whereas, this growth and grouping of medical resources is natural and good, and in most instances results in better medical service for the public, and

"Whereas, the word 'clinic' implies resources and facilities not usually found in a private physician's office, and

"Whereas, there are rapidly becoming too many one- and two-physician clinics, which are unethical, misleading, false advertising; therefore, be it

"RESOLVED: That this House of Delegates of the Michigan State Medical Society request The Council to appoint a committee to study this situation and make recommendations to the House of Delegates for proper action."

This was referred to the Reference Committee on Resolutions.

X—20. HONORARY MEMBERSHIP TO THE LATE J. JOSEPH HERBERT

J. H. Fyvie, M.D.:

"Whereas, Mr. J. Joseph Herbert has been an honorary member of the Delta-Schoolcraft Medical Society for several years, and

"Whereas, Mr. Herbert was officially nominated by the Delta-Schoolcraft County Medical Society for honorary membership in the Michigan State Medical Society because of his long, devoted and able service to the medical profession, and

"Whereas, the untimely passing of Mr. Herbert precluded the according of this honor prior to his death; therefore, be it

"RESOLVED: That the Michigan State Medical Society House of Delegates elect Mr. J. Joseph Herbert to honorary membership in the Michigan State Medical Society posthumously; and be it further

"RESOLVED: That this membership be presented to his widow, Mrs. Imogene Herbert."

This was referred to the Reference Committee on Special Memberships.

X—21. APPROVAL OF MEDIATION-ETHICS-GRIEVANCE COMMITTEE RECOMMENDATIONS

W. A. Scott, M.D.:

"Whereas, the Mediation, Ethics and Grievance Committee of The Council of MSMS has recommended the consideration of changes in Chapter 6 of the Michigan State Medical Society Bylaws and the addition of a Chapter 7 with subsequent re-numbering of the remaining Chapters, and

"Whereas, the purpose of these changes is to provide a simple and fair mechanism for handling minor offenses as well as more serious charges, and yet keep the Society protected in the event of court action; therefore, be it

"RESOLVED: That the recommendations of the Mediation, Ethics and Grievance Committee of the MSMS be approved by the House of Delegates."

This was referred to the Reference Committee on Constitution and Bylaws.

X—22. NEW MSMS HEADQUARTERS

W. A. Scott, M.D.:

"Whereas, increasing demands for service are being made upon the MSMS by the medical profession and the public, and

"Whereas, such demands must be met by well-planned and effectively executed programs, and

"Whereas, the administration of such programs must of necessity center in the Executive Office of MSMS, and

"Whereas, present Lansing facilities for the Executive Office are already strained to the utmost and unless expended shortly will hamper the efficient execution of MSMS programs, and

"Whereas, it is reliably estimated that a proper headquarters can be built and equipped for an amount approximating $300,000; therefore, be it

"RESOLVED: That a new MSMS headquarters be built and equipped in Lansing, Michigan; and be it further

"RESOLVED: That for the building of this new headquarters the sum of $300,000 be raised by:

"(1) The sale (at the proper time) of our present headquarters.

"(2) By the use of present building reserves.

"(3) By the increasing of dues in the amount of $5 per year, beginning in the 1957 fiscal year, said increase in dues to be used only for the purpose of defraying the cost of building and equipping a new MSMS headquarters."

This was referred to the Reference Committee on Miscellaneous Business.

X—23. REGULATION OF AMBULANCE OPERATION

G. H. Bauer, M.D.:

"Whereas, a number of accidents have occurred recently which involved speeding ambulances, and

"Whereas, these accidents constitute a hazard to the ambulance passengers and to the public, and

"Whereas, in the overwhelming majority of cases there is no medical justification for such hazardous operation of ambulances; therefore, be it

"RESOLVED: That the Michigan State Medical Society go on record as strongly urging more stringent regulation of ambulance operation by appropriate civil authorities."

This was referred to the Reference Committee on Legislation and Public Relations.

X—24. APPRECIATION OF THE LATE HENRY A. LUCE, M.D.

A. H. Price, M.D.:

"Whereas, with the death of Henry A. Luce, M.D., the medical profession has lost a most valued friend and leader, and

"Whereas, Dr. Luce for years served faithfully and capably in this House of Delegates as delegate from Wayne County, as President of the Michigan State Medical Society, as delegate to the American Medical Association for eighteen years, as a member of the Special Study Committee of Medical Services in England, France and Italy, and in many other responsible assignments; therefore, be it

"RESOLVED: That this House of Delegates express its deep appreciation for the faithful work and the inspiring leadership of Dr. Luce and its sorrow at his passing; and be it further

"RESOLVED: That a copy of this resolution be sent to the family of Dr. Luce."

This was referred to the Reference Committee on Miscellaneous Business.

X—25. ADEQUATE FUNDS TO CARRY OUT CIVIL DEFENSE

Louis Jaffe, M.D.:

"Whereas, a well-developed civil defense is imperative for the survival of this nation in the event of enemy action against civilian populations, and

"Whereas, the State of Michigan contains within its boundaries several areas of prime importance to national survival, and

"Whereas, medical planning for the care of mass casualties and displaced populations is a major factor in civil defense, and will require the potential of the entire State of Michigan, and

"Whereas, the Department of Health of the State of Michigan is the logical agency to direct and to stimulate medical planning in the State, and to integrate medical facilities in the event of enemy attack or in natural disaster; now, therefore, be it

"RESOLVED: That the Legislature of the State of Michigan be respectfully requested to appropriate annually sufficient funds to the State Health Department so that it may discharge its responsibilities in the medical aspects of civil defense."

(See Reference Committee Amendment, Page 1533).

This was referred to the Reference Committee on Legislation and Public Relations.

X—26. PERMANENT ADVISORY COMMITTEE ON FEES

E. H. Fenton, M.D.:

"Whereas, inequities exist in professional fee schedules, and

"Whereas, the monetary value of medical and surgical procedures fluctuates, and

"Whereas, it is impractical to remedy these inequities without considerable study, and

"Whereas, certain dissatisfactions within the profession could be minimized by a continuing consideration of these fee schedules, and

"Whereas, a temporary committee has inadequate time to consider the problem; therefore, be it

"RESOLVED: That the Michigan State Medical Society establish a permanent Advisory Committee on Fees."

(See Reference Committee amendment. Page 1532).

This was referred to the Reference Committee on Resolutions.

X—27 (Const. Art. X, Sec. 1, 2, & 3) TO MAKE VICE SPEAKER A VOTING MEMBER OF THE COUNCIL AND OF ITS EXECUTIVE COMMITTEE

A. S. Narotzky, M.D.:

"Whereas, the Vice Speaker of the House of Delegates of the Michigan State Medical Society is presently a member of The Council and the Executive Committee but without power to vote, and

"Whereas, The Council, desiring broader representation of the House of Delegates on the Executive Committee has recommended that the Vice Speaker be given full membership on The Council and the Executive Committee, therefore be it

"RESOLVED: That the House of Delegates take action to amend the Constitution and Bylaws to make the Vice Speaker of the House of Delegates a member of The Council and the Executive Committee by amending Section 1 of Article X of the Constitution by inserting the words 'and Vice Speaker' after the word 'Speaker'; by amending Section 2, Article X of the Constitution by striking out the words 'and the' preceding the word 'Speaker' and inserting after the word 'Speaker' the words 'and Vice Speaker'; by deleting

Section 3 of Article X of the Constitution; and by amending Section 1 of Chapter 9 of the Bylaws by inserting the words 'and Vice Speaker' after the word 'Speaker.' "

This will be laid in the record and will not be considered further at this session because it is a Constitutional amendment, and it will come up in next year's House of Delegates for action.

X—28. URGING TOTAL PARTICIPATION OF M.D.'s IN MMS

J. R. Heidenreich, M.D.:

"Whereas, there is an apparent lack of full understanding and appreciation of the basic principles and philosophy of Michigan Medical Service by at least 1,200 Michigan doctors of medicine, and

"Whereas, the Michigan State Medical Society in the early and late 1930s developed the only prepayment plan that has sustained the private practice of medicine, and

"Whereas, this work of the pioneers in the prepayment field of medical care is obviously in serious jeopardy through the current activities of outside pressures promoting schemes and the use of controls at variance with organized medicine, and

"Whereas, organized medicine has maintained this prepayment plan of medical-surgical and obstetrical care which is controlled by the Society to which we belong and which still retains a strong voice in the determination of the policies of Michigan Medical Service and the setting of fees and conditions under which fees shall and shall not be paid, and

"Whereas, this plan was proclaimed by the late Senator Arthur Vandenberg as 'Michigan's greatest public trust,' and a very important reason why legislation in the United States Senate has not been passed which might have been detrimental to the private practice of medicine, and

"Whereas, we in the Upper Peninsula Medical Society who are enrolled 100 per cent do not feel that our colleagues in some of the metropolitan areas of the Lower Peninsula are supporting Michigan Medical Service with the same enthusiasm as is found in our community, and

"Whereas, it must be the contribution of each and every member of this Medical Society, either in the Upper Peninsula or in the Lower Peninsula, to assist, promote, improve and actively participate with the service principles of Michigan Medical Service since such service principles have been acknowledged as the basic reasons why nearly 3½ million Michigan people have the protection sponsored by the Michigan State Medical Society rather than inferior indemnity insurance or plans which might have been instituted should the doctors' own plan have failed; therefore, be it

"RESOLVED: That the Michigan State Medical Society recommend to each of its component county medical societies that they engage in an active campaign to obtain the highest percentage of participation possible within their organizations, in addition to a forthright effort, to be certain that doctors who already participate understand what their participation means to themselves as individual private practitioners of the science and art of medicine, what it means to their patients to have a system for the prepayment of their medical-surgical and obstetrical expenses, what it means to the practice of medicine as we now enjoy it as a free enterprise where free men are disciplined men but still are free men, and what it will mean to our sons who are or may become doctors of medicine; and be it further

"RESOLVED: That this State Medical Society, its members and officers assist each county in its campaign to see that Michigan Medical Service remains as the most successful prepayment plan for the expense of medical-surgical and obstetrical care and by such success reduce the threat of interference of less desirable schemes by proving their lack of ability to match or even come close to what is and can only be provided by doctors of medicine through their own agency, Michigan Medical Service."

This was referred to the Reference Committee on Medical Service and Prepayment Insurance.

X—29. (ByLaws, Chapter 8, Section 10-J) CHANGING NAME OF A HOUSE OF DELEGATES REFERENCE COMMITTEE (National Defense and Disaster Planning)

M. L. Lichter, M.D.:

"Whereas, the Reference Committee on Emergency Medical Service, as provided for in Chapter 8, Section 10-j No. 13 of the Bylaws is not an accurately descriptive name for the function it is to perform; therefore, be it

"RESOLVED: That Chapter 8, Section 10-j No. 13 of the Bylaws be amended to read, 'National Defense and Disaster Planning.' "

This was referred to the Reference Committee on Constitution and Bylaws.

X—30.—URGING TOTAL PARTICIPATION OF M.D.'S IN MMS (Bowman)

D. A. Bowman, M.D.

"Whereas, I was at one time not in sympathy with some of the principles of Michigan Medical Service, which was before I became exposed to the background and philosophies of Michigan Medical Service just one year ago when I attended my first State Medical Society meeting as a delegate from Bay County, and

"Whereas, there are many physicians, especially in the young age group, who feel as I did previously, and

"Whereas, those early pioneers who put prepayment on a voluntary basis and in the hands and control of the medical profession are gradually fading from the scene, and must be replaced by doctors who must learn the philosophies and principles through their association and tutelage of our senior Society members, and

"Whereas, in view of current attempts to impose a type of police force on the practice of medicine, or replace the voluntary idea with a system controlled and directed by persons not in sympathy with the ideals and ideas of medical organization, and

"Whereas, the survival of the voluntary system of prepayment medical care depends on a unity within this State Medical Society which does not now exist to the extent which is necessary, due to the absence of a thorough understanding of the basic philosophies of Michigan Medical Service by younger physicians; therefore, be it

"RESOLVED: That the Michigan State Medical Society stop at nothing short of getting 100 per cent participation in Michigan Medical Service of all of the members of this Society, and put on a concerted drive to thoroughly indoctrinate each and every doctor of medicine who is a member of the Michigan State Medical Society in his obligation to himself, his patients and his Society by living up to and conforming to the rules, regulations and practices of Michigan Medical Service, and to convince each private practitioner of medicine, with emphasis on the younger men, that a sacrifice of a few dollars today, in an era of prosperous medical practice, will prevent the loss of more than just dollars should this voluntary system fail."

This resolution was referred to the Reference Committee on Medical Service and Prepayment Insurance.

X—31. ANNUAL REGISTRATION OF M.D.'s

O. J. Johnson, M.D.:

"Whereas, under the present system of initial registration of doctors of medicine it is difficult for the State Board of Registration in Medicine to keep ac-

curate records of physicians and their location of practice, and

"Whereas, accurate information about doctors of medicine is necessary to locate illegal practitioners, and

"Whereas, it is estimated by the State Board of Registration in Medicine that there are several hundred illegal practitioners in the State, and

"Whereas, such information will be valuable to civil defense authorities for mobilization in the event of disaster or like emergency, and

"Whereas, thirty-eight states have enacted legislation for the annual registration of doctors of medicine; therefore, be it

"RESOLVED: That this House of Delegates approves legislation to provide for the annual registration of doctors at a fee which will provide sufficient funds to carry out its provisions, but such fee not to exceed $5."

This was referred to the Reference Committee on Legislation and Public Relations.

(Vice Speaker K. H. Johnson, M.D. (Ingham), assumed the Chair.)

XI. REPORTS OF STANDING COMMITTEES

XI—1. COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION

The first report is that of the Committee on Postgraduate Medical Education, found on page 95 of your Handbook. This Committee's report will go to the Reference Committee on Reports of Standing Committees.

XI—2. COMMITTEE ON PREVENTIVE MEDICINE AND SUBCOMMITTEES

The report of the Preventive Medicine Committee and its subcommittees is found on page 99 of the Handbook. This report as printed will go to the Reference Committee on Reports of Standing Committees.

XI—3. PUBLIC RELATIONS COMMITTEE AND SUBCOMMITTEES

The report is on page 115.

XI—4. ETHICS COMMITTEE

The Ethics Committee's report is on page 122.

XI—5. LEGISLATIVE COMMITTEE

The report of the Legislative Committee is on page 123.

XII. REPORTS OF SPECIAL COMMITTEES

XII—1. SCIENTIFIC RADIO COMMITTEE

The report appears on page 126.

XII—2. ADVISORY COMMITTEE TO THE WOMAN'S AUXILIARY

The report of this committee appears on page 127.

XII—3. ADVISORY COMMITTEE TO THE MICHIGAN MEDICAL ASSISTANTS SOCIETY

The report of the Advisory Committee to the Michigan Medical Assistants Society is found on page 128 of the Handbook.

XII—4. COMMITTEE TO STUDY MSMS FINANCIAL STRUCTURE

O. K. Engelke, M.D.:

This report of the Special MSMS Committee to Study Finances and Dues of the Michigan State Medical Society should be qualified with this understanding: Throughout this report we use the words "reserve funds" or "surplus funds." With the idea that these are monies the Committee describes as being available to the Michigan State Medical Society in fairly fluid form, the word "reserve" does not have the same meaning in this report that it may have in reports of The Council.

I repeat: The word "reserve" and the word "surplus" as found in this report have a different meaning than some special funds designated as reserve funds by The Council of the Michigan State Medical Society. We use these words in this report to designate funds that are in fairly fluid form, readily available to the Society in the event of any type of emergency, change in program, and so on.

This Committtee was authorized by the 1955 House of Delegates in an amended amendment to the motion to accept the original report of The Council as well as a supplemental report relative to a proposed $10 increase in dues. (Dr. W. W. Babcock's amendment, amended by Dr. O. J. Johnson.)

Working members of the Committee appointed by Speaker J. E. Livesay, M.D., are: Otto K. Engelke, M.D., of Washtenaw, Chairman; C. W. Colwell, M.D., of Genesee; E. H. Fenton, M.D., of Wayne; Earl G. M. Krieg, M.D., of Wayne, and H. J. Meier, M.D., of Branch.

This Committee has met five times since March 20. Attendance has been excellent, with but one or two absences recorded. All meetings were held in executive session except the first and third. At the Committee's request, these two meetings were held at the MSMS Lansing office where resource people and important data were available.

State officers and staff personnel called to the first meeting were: D. Bruce Wiley, M.D., Chairman of The Council; Ralph W. Shook, M.D., Chairman of the Finance Committee; L. Fernald Foster, M.D., Secretary; William J. Burns, Executive Director; Hugh W. Brenneman, Public Relations Council, and R. J. Roney, Assistant Executive Director.

Dr. Foster, Mr. Brenneman, and Mr. Roney were called to the third meeting. All other Committee sessions were held at Ann Arbor, with Committee members only in attendance. No Society-purchased liquor was consumed at any of our meetings. (Laughter). This was found to be the policy in effect at all similar Society functions.

The officers and staff members of the Society gave full co-operation. Financial reports, budgets, auditors' statements, special Society reports, material from professional and other Michigan organizations, medical societies from other states, and special bits of relative data were promptly supplied to the Committee. Legal counsel was given by the late Mr. J. Joseph Herbert.

I would like to add that the minutes of the meetings of this Committee are in good order, and subsequent to the wishes of the Speaker of the House of Delegates may be placed at your disposal, if it is so decided.

The first meeting was dedicated to a general discussion of the problems by resource people as well as a review of Society budgets back through 1953, item by item. Additional information was requested, as here listed:

A—An individual salary breakdown.

B—Summary of employes' retirement first costs.

	Total	Society Share	Employe Share
Premium—1 year	$19,833.41	$10,663.25	$9,170.16
Refund—Deceased employe	891.54	448.38	443.16
NET COST	$18,941.87	$10,214.87	$8,727.00
Monthly collections from employes	7,890.35		7,890.35
	$11,051.52		$ 836.65
Due from employes in January, 1956	836.65		836.65
	$10,214.87	$10,214.87	—0—

C—Brief outline of each employes' duties.

Brief Outline of Duties of MSMS Executive Office Personnel

WILLIAM J. BURNS, Executive Director, executes all details of the progressive program devised by the House of Delegates and The Council of the Michigan State Medical Society, as assigned to him by the Secretary (per Bylaws, Chapter 11, Section 8.)

HUGH W. BRENNEMAN, Public Relations Counsel, administers the public relations and central educational program of the Michigan State Medical Society, and helps to promote cordial liaison between MSMS and other medical, health, professional and trade organizations, usually working on the administrative level. Acts as secretary to certain MSMS committees at their meetings.

WARREN F. TRYLOFF, Public Relations Field Secretary, represents MSMS in central educational activities, works in public relations programs of MSMS and acts as liaison with Wayne County Medical Society and fourteen others in Southeastern Michigan. Acts as secretary to certain MSMS committees at their meetings.

RICHARD N. PHILLEO, Public Relations Field Secretary, represents MSMS in central educational activities, works in public relations programs of MSMS, and acts in liaison capacity with thirty-three county medical societies and MSMS.

A. DEWITT BREWER, Associate Public Relations Counsel, helps to plan and carry out MSMS public relations program. Writes MSMS news releases, press kits, and prepares copy for various brochures and other MSMS publications. Serves as field secretary for nine county medical societies and staff liaison with MSMS Woman's Auxiliary. Acts as secretary to various committees and committee meetings. Works with various phases of MSMS central educational program.

ROBERT J. RONEY, Assistant Executive Director, handles JOURNAL advertising and proofreading, all membership records, including correspondence, and Directory publications. In charge of building maintenance and supplies purchasing. Also of books of accounts and processing of checks and records of financial transactions.

HELEN SCHULTE, Administrative Assistant, chief Secretary to Executive Director; supervisor of stenographers' pool; organizes all scientific programs for annual sessions and Michigan Clinical Institutes.

GERALDINE CHAPMAN, Secretary to Executive Director, handles committee meetings, including notices, agenda, room reservations; correspondence and records for technical exhibits at conventions, and general correspondence.

JEAN MACDONALD, Secretary to Public Relations Counsel, also supervises distribution of literature, films and other public relations media. Works closely with the Michigan State Medical Assistants Society.

MARILYN J. LEWIS, member of stenographic pool, head telephone operator and receptionist; transcribes cylinders—Mr. Burns and Mr. Roney; proofreads stencils of all committee minutes; types stencils.

VADA STUDT, member of stenographic pool; secretary of Lansing Rheumatic Fever Center (correspondence with doctors referring patients and with patients, setting up clinic dates with hospital and with patients, notifying clinic members of meeting dates, attending monthly clinics and consultation meetings which follow, transcribing reports on patients, and keeping Lansing Center records); transcription of cylinders for Mr. Burns and Mr. Brewer; filing of committee minutes and correspondence; posting of memberships.

THERESA KRZESICKI, member of stenographic pool; types committee minutes stencils and proofreads, mimeographs minutes and forwards minutes to committee members and members of The Council; makes address changes for MSMS membership; sends out membership cards to MSMS membership, types stencils, copy work, and other typing.

MARGARET CORNWELL, member of stenographic pool; files all newspaper clippings, types routine form letters requesting copies of pamphlets, etc.; does all mimeographing; collects and folds all mail twice daily; types stencils and other materials.

ARNOLA MACQUEEN (starts work at MSMS on May 28), member of stenographic pool; second telephone operator and receptionist; will transcribe cylinders, type stencils, and other typing.

AGNES HILL, secretary to Warren F. Tryloff (in Detroit office).

STANLEY GUSTAFSON (part-time), mail clerk, equipment operator.

JACK MCMANUS (part-time), janitor.

Other MSMS employes (part-time) who are not housed in Executive Office are: Secretary L. Fernald Foster, M.D., Bay City; Editor Wilfrid Haughey, M.D., Battle Creek; Rheumatic Fever Co-ordinator Leon DeVel, M.D., Grand Rapids (plus five Rheumatic Fever Center secretaries); and Legal Counsel J. Joseph Herbert, Manistique.

D—List of dues from medical societies of other states.

DUES AND SPECIAL ASSESSMENTS OF STATE MEDICAL ASSOCIATIONS AS OF MAY 16, 1956

State	*Dues*	*Special Assessments*	*Comments*
Alabama	$20	—0—	Dues $50 effective 1/1/57
Arizona	60	—0—	Dues $70 effective 1/1/57. Extra $10 for AMEF
Arkansas	25	—0—	
California	50	—0—	
Colorado	50	—0—	
Connecticut	28	$10 voluntary assessment for building addition	
Delaware	50	—0—	
Florida	40	—0—	
Georgia	25	—0—	
Idaho	40	—0—	
Illinois	40	—0—	
Indiana	30	—0—	
Iowa	60	—0—	$25 increase authorized but not levied as yet
Kansas	40	—0—	
Kentucky	35	—0—	
Louisiana	50	—0—	
Maine	35	—0—	It is planned to raise the dues to $60 this June
Maryland	Baltimore City members, $50 County Society members, $30	—0—	
Massachusetts	35	—0—	
Michigan	45	$10 assessment for 1956 only	
Minnesota	40	—0—	
Mississippi	35	—0—	Dues to be increased $5 per year for 3 years: 1957, $40; 1958, $45; 1959, $50
Missouri	25	$10 assessment for 1957 only	
Montana	53.50	—0—	
Nebraska	35	—0—	
Nevada	100	$20 (AMEF)	
New Hampshire	40	—0—	
New Jersey	30	—0—	

New Mexico	70	—0—	
New York	25	$10 assessment (effective 1/1/57) to be used for employes' pension fund	
North Carolina	40	—0—	
North Dakota	75	—0—	
Ohio	20	—0—	Dues $25 effective 1/1/57
Oklahoma	42	—0—	
Oregon	40	—0—	
Pennsylvania	40	—0—	
Rhode Island	50	—0—	
South Carolina	20	—0—	
South Dakota	75	—0—	
Tennessee	25	—0—	
Texas	50	—0—	
Utah	50	$20	
Vermont	35	—0—	
Virginia	25	—0—	
Washington	35	—0—	
Washington D. C.	50	—0—	
West Virginia	25	—0—	
Wisconsin	65	—0—	
Wyoming	25	—0—	

E—Employes roster for 1954-1956.

F—From all sources, justification of the need for a reserve for two years. (See Burns letter of May 16 for conclusion).

"The immediate following paragraphs on *Budgeting for Reserves* were printed in the National Institute's 'bible,' called *Trade Association Management.*" (From Wm. J. Burns to Dr. Otto K. Engelke, May 9, 1956).

Budgeting for Reserves

It is generally recognized that an association should build up a reserve ample enough to meet the following needs: (1) To provide adequate working funds; (2) to act as a cushion to take care of unanticipated expenditures, and (3) to furnish adequate funds to carry the organization through a depression period without too great a curtailment of activity.

In the course of events, there can never be complete certainty that the necessity for unanticipated expenditures may not arise during the next fiscal year. It is undesirable that each annual budget should have to provide substantially for unknown contingencies. Therefore, most trade associations try to build up, year by year, a reserve for unanticipated expenditures to a point sufficient in due time to eliminate any necessity for inclusion in each current year's budget of a special amount for unknown contingencies.

Reserve Funds

Approximate Percentage of Annual Budget

A Study of 255 Associations by the U. S. Chamber of Commerce

Percentage	*Number of Associations*	
Under 10	24	
10-20	18	125 below MSMS group in reserve funds.
21-30	14	
31-40	19	
41-50	31	
51-60	9	
61-70	10	
71-80 (MSMS 74%)	15	MSMS here
81-100 (Dec., 1956)	78	Largest single group
101-150	8	
151-200	16	
201-250	1	
251-300	6	120 above MSMS group in reserve funds.
301-400	4	
Over 400	2	
	255	

In addition, it is generally agreed that associations should establish a reserve sufficient to meet the minimum costs of operation for a period of at least one year so that, should adverse conditions such as those imposed by a severe depression occur, it may be possible substantially to reduce the income budget even while the expense budget is maintained. The future of the organization is thus assured by providing a source of funds from which part of the necessary costs of operation could be met for each of several years, if necessary.

Special Note From Committee

$360,000 approx.—MSMS average rate of expenditure per year.

225,000 approx.—MSMS reserve late in December, 1955, when finances are traditionally at lowest ebb.

12,000 approx.—Income not included in 5,000 paid member estimate for 1956.

50,000 approx.—To be placed in reserves ($7.50 per paying member out of $10 assessment.)

$287,000 approx.—Reserve anticipated December, 1956.

* END OF NOTE *

The establishment of a reserve sufficient to meet these purposes for a period of two years may best be accomplished by including in the budget, each year for a sufficient number of years, funds adequate to establish a reserve for contingencies and unanticipated expenditures accruing up to one or two years of a normal budget. The best practice is frankly to include in the budget each year, until the required reserve is fully established, an amount sufficient to obtain the desired reserve in a reasonable time.—*Trade Association Management*

At the next meeting much additional information was requested on pertinent items. A few examples are here listed:

1. The production of the movies by the MSMS staff, the necessity of such movies and their cost compared to the others available from the AMA.

Production of Movies by MSMS.—Mr. Brenneman gave the following information: First movies were in opposition to socialized medicine and were "To Your Health"—cost $15,000, and "Lucky Junior"—cost $11,000. (Nothing on these subjects was available from any source.)

"To Save Your Life"—$4,000. This was double length and in color.

"In Planning Your Career"—$2,200.

One on "Epilepsy" is now 75 per cent completed and will cost about $2,500. Two more have been authorized, as follows: (a) "Cost of Medical Care"; (b) "Periodic Health Appraisal."

No movies have been completed that could have been gotten from the AMA or other source. The MSMS was first in the field of film productions.

The Committee explained the use of their movies. Explanations were generally satisfactory.

2. Expenditures of the MSMS funds in recent news releases refuting inaccurate information released by certain newspapers regarding Blue Cross and Blue Shield.

News Releases re Blue Cross-Blue Shield.—Only one was made, and that was purely educational and a good investment.

Two others were not prepared (action of Executive Committee). The cost of the one in about six newspapers cost $4,500—one-half of which was paid by MSMS.

3. A more detailed explanation of the securities on hand at the end of the calendar year with expenses anticipated for the first quarter of the new calendar year and the securities on hand at the end of the first quarter with respect to programs anticipated for the balance of the calendar year.

Securities on Hand.—Mr. Roney discussed this, and it was developed that in December 1955 (low period of

funds) the Society had a total of $225,000 in all funds. Financial report and budget studies also indicated a reserve of $275,000 to $300,000 at the end of 1956.

4. The possibilities of income tax liabilities, were a $600,000 financial surplus established. The Committee requested a legal opinion from Mr. Herbert on this matter.

LETTER FROM MR. HERBERT TO DR. ENGELKE

June 8, 1956
127 South Cedar Street
Manistique, Michigan

Otto K. Engelke, M.D.
720 E. Catherine Street
Ann Arbor, Michigan

Dear Dr. Engelke:

This letter is in confirmation of an oral opinion which has doubtless been relayed to you by Mr. Hugh Brenneman.

The Committee on the Study of the MSMS, of which you are Chairman, has raised two questions:

1. Does the income derived by the MSMS, from dues and assessments in excess of immediate annual needs, or the accumulation of such income, become subject to federal income tax?
2. Is the income derived from such accumulated reserve fund subject to federal income tax?

Michigan State Medical Society has been certified by the Internal Revenue Service as a corporation exempt from tax under provisions of Section 501 (c) (6), Internal Revenue Code 1954. At the time of the exemption the identical provision appeared as Section 101(7), Internal Revenue Code 1939. The Society was classified as a "business league" within the meaning of the subsection.

So long as the Society does not alter its activities from that in which it was engaged at the time it was classified and exempted, the exemption from federal tax remains. As far as I know, there has been no change.

The only other situation which would give rise to federal income tax appears in Sections 511, 512 and 513, I.R.C. 1954. These sections provide for an exception when a corporation exempted under Section 501 has "unrelated business taxable income."

"Unrelated trade of business" is defined in Section 513 as "any trade or business, the conduct of which is not substantially related * * * to the exercise or performance by such organization of its charitable, educational or other purpose or function constituting the basis for its exemption under Section 501."

"Unrelated business taxable income" is defined by Section 502 as "the gross income derived by any organization from any unrelated trade or business regularly carried on by it." However, there is excluded from such income "all dividends, interest and annuities and all deductions directly connected with such income." Section 512(b) (1).

The income to which your question is directed is obviously not "unrelated taxable business income" as defined by statute. Moreover, the income derived from the accumulations in the reserve fund consists merely of interest or dividends.

It is my opinion, therefore, that the answer to both of your questions is "no."

Very truly yours,
s/ J. Joseph Herbert, *Legal Counsel*

5. The value of the field representatives of the MSMS to the public relations programs of Wayne County and other local areas in the State. The public relations program of Wayne County and its relationship to the State public relations program. The virtues of an MSMS refund to such counties for local public relations programs.

Value of Public Relations Field Representatives to Public Relations of Wayne County and Other Parts of State.—Mr. Brenneman explained these activities in detail.

The Committee concluded that public relations are a Statewide activity, regardless of the size and other conditions of local areas.

6. An explanation of the preprandial activities of the several meetings of the State organization.

Preprandial Expenses.—It was determined that it was the policy of MSMS to pay for no preprandial activities except at specific gatherings where MSMS was host to groups—e.g., Exhibitors Gridiron, Press Dinners, Health Officers' Reception, et cetera.

7. The costs of the Mackinac Island summer meeting.

Expense of Mackinac Island Council Meeting.—Secretary Foster announced that a check on costs showed that the meeting at Mackinac Island was scarcely more expensive than if held in Detroit. Better attendance made for a better meeting.

The Society committee membership activity and other "in-service" educational activities were discussed. Expenses allowed participants were frugal when compared with time and income lost by most committees and other members in addition to benefits accruing nonworking members and the public.

8. Expenditures of the Osteopathic Society, such as dues, assessments, etc., as well as similar expenditures by the State Dental Society, State Bar Association and others.

Other Society Dues.—Mr. Brenneman gave the following information:

Bar Association—8,000 members, $15 dues plus $5 each of four sections plus $25 building fund. Total, $60.

Dental Society—3,200 members, $25. No activities. One executive secretary and one stenographer.

Osteopathic Society—$300 per year.

9. Justification of the two-year surplus and requirement along with the statement of the surplus condition of Ohio, New York and California. A statement regarding the time interval which should be used building up the recomemnded surplus.

Justification of Two Years' Surplus.—California has $1,000,000 in reserves. Ohio has $90,000 in reserve and is raising dues $5 this year to 8,200 members which will add about $40,000 more. The MSMS has established no time limit on when to have reserve fund completed.

10. The history of the use of the contingent fund.

11. An explanation of anticipated commitments in the public relations programs.

12. A concise statement regarding the public relations program.

Subsequently, additional material was requested regarding state societies in whose jurisdiction there are medical schools to see if there is a problem of dues with full-time faculty members having low incomes.

In the states of New York, Ohio and Texas there are no special memberships for faculty members or those on low fixed incomes aside from those in military service or in training normally as civilians for a limited number of years.

The California situation is as follows:

L. Fernald Foster, M.D., Secretary
Michigan State Medical Society
606 Townsend Street
Lansing 15, Michigan

Dear Fern:

In reply to your letter of July 6, the California Medical Association does not maintain a separate

membership classification for full-time medical school professors. However, we do have a classification of Associate Membership which is available to faculty members, public health officers, ad others who are engaged in full-time administrative work and who do not engage in the private practice of medicine. These members pay one-half the annual dues for active members and are carried as Associate Members of the AMA, paying no AMA dues. Most of our county societies also reduce the dues of these members to one-half those for active members.

I hope this information will be helpful to you.

Cordially yours,

s/ JOHN HUNTON, *Executive Secretary*

The Medical Society of Pennsylvania is as follows:

"We do not have any special types of membership such as you have in mind. Faculty members who are licensed to practice in Pennsylvania pay full dues if they belong to the county medical society, State Medical Society, and American Medical Association regardless of whether they are full-time or part-time faculty members and whether or not they engage in private practice. They are considered as active, dues-paying members.

"You will note in the second paragraph, top of page 8, that active members who are serving hospital residencies pay 40 per cent of the regular assessment during the period of training, if such training is begun during any of the first five years following graduation from medical school. Section 2 on page 8 gives the qualifications for Associate Membership.

"On page 10 you will find in Section 3 our definition of Affiliate Members. Please note the sentence half way down the paragraph: 'They shall be doctors of medicine not holding license to practice in Pennsylvania.' Many faculty members are Affiliate Members, provided they are not licensed to practice in Pennsylvania. Section 4 on page 10 described Honorary Members.

"Very sincerely yours,
Secretary-Treasurer"
"s/ HAROLD B. BARDNER, M.D.

The Illinois situation is as follows:

"We handle all applications for consideration for a 'cut' in dues on the individual basis—as 'hardship' cases. This covers the older men returning for residency training who don't qualify under the Constitution and Bylaws, and younger teachers on a full-time basis who are not paid enough to absorb their dues in the ISMS, and the AMA and county society. We have very few in either group; in fact, the older residents are much more frequent than the full-time teachers.

"Yours very sincerely,
"s/ HAROLD M. CAMP, M.D.
Secretary

Wisconsin has as follows:

CONSTITUTION AND BYLAWS OF THE STATE MEDICAL SOCIETY OF WISCONSIN

Chapter VIII—Dues and Assessments

Section 5. *Educational Memberships*

Physicians engaged solely in educational and research activities, and no part of whose income is derived from the private practice of medicine, shall be eligible to full membership in this Society, with all the privileges and responsibilities of membership, upon the payment of annual dues equal to approximately 75 per cent of that annually determined for full dues-paying members. Such members shall be issued a certificate denoting such special membership, and the content shall be approved by the Council. Application for such membership shall be endorsed by the chief of service or other physician in supervision.

Membership and income figures for the depression and war years were received to determine the effect of hard times and membership depletion in the resources of the society.

For: Committee to Study MSMS Financial Structure
July 2, 1956

UNPAID MEMBERS OF THE MICHIGAN STATE MEDICAL SOCIETY 1928-1938

Year	*Total Members*	*Unpaid Members*
1928	3,457	Not available
1929	3,463	Not available
1930	3,417	250
1931	3,235	335
1932	3,293	234
1933	3,160	450
1934	3,393	175
1935	3,650	138
1936	3,725	141
1937	3,963	144
1938	4,205	115

COMPARISON OF MEMBERSHIP AND NUMBER OF MILITARY MEMBERS DURING WORLD WAR II PERIOD

(Military Members were granted remission of membership dues)

* * *

1939	4,425	–0– Military
1940	4,527	–0– Military
1941	4,621	209 Military
1942	4,714	1,127 Military
1943	4,786	1,142 Military
1944	4,702	1,151 Military
1945	4,686	1,353 Military
1946	4,799	130 Military
1947	4,797	103 Military
1955	6,109	430 Military & Associate

POPULATION FIGURES FOR MICHIGAN

April 1, 1930	4,842,325
April 1, 1940	5,256,106
April 1, 1950	6,371,766

It will be noted that unpaid memberships reached a peak of 450 during the depression, less than 20 per cent of members, and that military nonpaying members reached an average of about 26 per cent for four years during the last war.

It is conceivable that during the next war this figure may be much higher, with many doctors pressed into military and civilian defense duties.

Salaries of the executive staff of the MSMS and member officers were received. Comparisons were drawn with other societies with activities compared to those of the MSMS. The Committee found that rather than being overpaid, our Society was very conservative in its reimbursement of these men. Lower echelon paid staff salaries and benefits were found to be in line with others in similar jobs in Lansing.

Other facets of Society program, operation and financing too numerous to mention, were studied. Delegate activities, alternate delegate activities, as well as public education, public service, professional relations and such programs designed to educate lay people representing all areas in the State were examined and found to be sound.

The Committee has noted the recent signs of a continuation of the inflationary spiral. Maintenance of current program will of necessity cost more.

The Committee discussed at great length the complexity of the budget and financial reports as well as the location of the reserves therein.

Conclusions

1. The officers and professional staff of the MSMS are to be commended for their leadership in a program which is sound and well administered.

2. The part-time officers and full-time key professional staff are under-paid rather than over-paid. The AMA delegates and alternates as well as members of The Council, committees and others active in the Society make a very valuable contribution to the public and

Society welfare at a significant personal sacrifice in most instances.

3. Evidence was not produced to justify a reserve equal to two years of Society operation.

4. The current $45 dues and $10 assessment has placed the Society in good condition financially, with a reserve anticipated for December of 1956 of approximately $275,000 to $300,000. During times of stress, such as the last depression or last war, this will permit Society operation at the current level for at least three to four years with a curtailment of 25 per cent of income. With a reasonable curtailment of expenditures, one year's operation without any income whatever is possible. By the same token, a reasonable increase in program is possible with this reserve to meet any possible emergency in the interval between meetings of the House of Delegates.

5. The $10 assessment levied in 1956 should not be renewed.

6. A dues increase of $5 is recommended to protect this reserve, offset higher costs, to permit a continuation of program at its current level, and to adequately reimburse part-time officers, key full-time staff and others.

O. K. Engelke, M.D., *Chairman*
C. W. Colwell, M.D.
E. H. Fenton, M.D.
Earl G. M. Krieg, M.D.
H. J. Meier, M.D.

Mr. Chairman, I present this for the entire Committee to you, Mr. Speaker, and to the members of the House. (Applause)

Vice-Speaker Johnson: Dr. Engelke, I think I speak for the entire House when I say we appreciate the detailed manner in which you have gone into this matter and the precise way in which you have presented it. Thank you and your Committee.

This report of the Study Committee was referred to the Reference Committee on Miscellaneous Business.

X—32. BLUE SHIELD PLAN FOR DIAGNOSTIC OUTPATIENT SERVICES

J. D. Fryfogle, M.D.:

"Whereas, the original concept of Michigan Medical Service as a catastrophic insurance coverage is no longer true, and

"Whereas, the people of Michigan now accept prepaid health insurance and desire more complete insurance coverage through Michigan Medical Service, and

"Whereas, the preservation of control by the Michigan medical profession of prepaid medical insurance is desirable, and

"Whereas, the need for action is seen by the adverse publicity accorded our present program, and

"Whereas, Blue Shield has need for actuarial experience in any new plan proposed; therefore, be it

"Resolved: That the Michigan State Medical Society House of Delegates approve plans of Blue Shield to proceed with pilot projects of diagnostic outpatient services paid for by extended coverage."

This was referred to the Reference Committee on Medical Service and Prepayment Insurance.

X—33. SUBMISSION OF HOUSE OF DELEGATES RESOLUTIONS IN ADVANCE

O. J. Johnson, M.D.:

"Whereas, resolutions introduced to the House of Delegates of the Michigan State Medical Society are misunderstood, and

"Whereas, the members of the House of Delegates would be able to study a printed copy of resolutions; therefore, be it

"RESOLVED: That resolutions to be introduced to the House of Delegates of the Michigan State Medical Society be submitted to the headquarters of MSMS at least two weeks before the annual meeting of the House of Delegates; and be it further

"RESOLVED: That mimeographed copies of these resolutions be given to each delegate at time of registration; and be it further

"RESOLVED: That the number of resolutions not thus submitted be kept at a minimum."

This was referred to the Reference Committee on Resolutions.

(The meeting was recessed at 3:40 p.m.)

MONDAY EVENING SESSION

September 24, 1956

The meeting reconvened at 8:20 p.m., J. E. Livesay, M.D., Speaker of the House of Delegates, presiding.

X—34. MEDICAL CLASSES AT UNIVERSITY OF MICHIGAN AND WAYNE STATE UNIVERSITY TO SEND REPRESENTATIVES TO HOUSE OF DELEGATES SESSIONS

H. F. Falls, M.D. (Washtenaw):

"Whereas, it is the avowed policy of the Michigan State Medical Society to disseminate information to present and future physicians pertaining to medical economics, medico-legal and other aspects of medicine, and

"Whereas, the indoctrination of medical students in such subjects is a highly desired objective of this policy; be it, therefore

"Resolved: That the House of Delegates invite the medical classes of Wayne State and the University of Michigan to elect delegates to attend the House of Delegates' sessions, and that these representatives serve without vote but participate fully in all the functions of this organization; and be it further

"Resolved: That the expenses of such delegates be defrayed by the Michigan State Medical Society."

This resolution was referred to the Reference Committee on Resolutions.

XIII. REPORTS OF REFERENCE COMMITTEES

XIII—1. ON OFFICERS' REPORTS

Frank J. Busch, M.D. (Saginaw):

XIII—1 (a) *President's Address.*—The Reference Committee wishes to commend the address of Dr. Jones. It was a progressive and forward-looking report, and an excellent address. It is the recommendation of this Reference Committee that Dr. Jones' suggestion to explore the possibilities of a new site and building in Lansing for MSMS should receive the support of the entire membership of MSMS. The saving of the Veterans' Hometown Care Program was aided greatly by the personal efforts of Dr. Jones, and is commendable.

XIII—1 (b) *President-Elect's Address.*—The address of President-elect Arch Walls, M.D., was excellent, and shows we are in good hands for the forthcoming year. His invitation to labor keeps the door open for labor unions to co-operate in conferences for better understanding of the problems of distribution of medical care.

XIII—1(c) *Report of Delegates to the AMA.*—The Reference Committee wishes to commend the report of the delegates of the AMA as given by Dr. Hyland, and the showing of the film aided the problem of intra-professional relations and is recommended to be shown to every county society.

The complete report of the delegates of the AMA beginning on page 84 of the Handbook, should be read by each delegate.

XIII—1(d) *Report of Woman's Auxiliary.*—The report of the Woman's Auxiliary was an inspiration.

Attention is called to their very successful effort in the Dimes Campaign and the gift of $3,200 to the American Medical Education Foundation. They surely had a good year.

XIII—1(e) *Report of Michigan State Medical Assistants Society.*—The report of the Michigan State Medical Assistants Society was excellent. They are expanding rapidly, as evidenced by their new chapter in the Upper Peninsula and the increase in each of their other groups. They are serving the needs of the doctors of medicine more efficiently each year.

The Reference Committee report was adopted by the House of Delegates.

XIII—2. ON REPORTS OF STANDING COMMITTEES

E. A. Oakes, M.D. (Manistee):

XIII—2(a). COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION

The Reference Committee approves the annual report to be found in the Handbook.

XIII—2(b). PREVENTIVE MEDICINE COMMITTEE AND ITS SUBCOMMITTEES

(a) *Committee on Rheumatic Fever Control.* The Reference Committee reviewed their report and accepted it.

(b) *Cancer Control Committee.* The Reference Committee accepted this report.

(c) *Maternal Health Committee.* The Reference Committee accepted this report.

(d) *Veneral Disease Control Committee.* The Reference Committee wishes to delete three words at the bottom of page 104, "the diagnosis of" as being meaningless. Otherwise, the Reference Committee accepts the report.

(e) *Tuberculosis Control Committee.*—The report of this Committee, in the last paragraph on page 106, No. 1, was considered unsatisfactory and ambiguous, and not acceptable. The report states: "That excess beds be used for treatment and care of diseases which will permit flexibility of the utilization and of the beds to meet varying and largely unpredictable demands of tuberculosis."

We considered that this No. 1 is unsatisfactory and ambiguous, and do not believe it is acceptable.

To add to that, at the bottom of page 107, under "X-ray Survey Project in Southeastern Michigan," the Reference Committee felt this was not acceptable as written, and the following paragraph was presented by an adviser to the Reference Committee and was accepted in its place:

"Plans for a mass x-ray survey to be conducted in Southeastern Michigan in June, 1956, were discussed. It was agreed by the Committee that, recognizing that the 70 mm x-ray is a screening device for detecting tuberculosis, and recognizing that the effectiveness of a mass survey is better served by taking a 14 x 17 film where there is suspicion of chest disease for purposes of better identification, this particular project be authorized to use 14 x 17 film in the retakes as part of the survey project."

The Reference Committee moves the adoption of this report as amended.

(f) *Industrial Health Committee:* The Reference Committee accepts this report.

(g) *Mental Health Committee:* The Reference Committee accepts this report.

(h) *Child Welfare Committee.* The Reference Committee approved this report.

(i) *Iodized Salt Committee.* The Reference Committee approved this report.

(j) *Geriatrics Committee.* The Reference Committee approved this report.

XIII—2(c). PUBLIC RELATIONS COMMITTEE AND ITS SUBCOMMITTEES

The report of this committee and its subcommittees was approved by the Reference Committee, which felt that it had done a wonderful job.

XIII—2(d). ETHICS COMMITTEE

The report of the Ethics Committee was approved by the Reference Committee.

XIII—2(e). LEGISLATIVE COMMITTEE

The Reference Committee approved this report.

Finally, the Reference Committee moved the adoption of the report as a whole, as amended, and complimented the fine work of the various committees. The motion was put to a vote and carried unanimously.

XIII—3. ON REPORTS OF SPECIAL COMMITTEES

W. S. Carpenter, M.D. (Wayne): Your Reference Committee on Special Committee Reports considered the reports of three committees.

XIII—3(a) *Scientific Radio Committee.* The report of the committee was approved.

XIII—3(b) *Advisory Committee to the Woman's Auxiliary.*—The Reference Committee approved the report.

XIII—3(c) *Advisory Committee to the Michigan State Medical Assistants Society.*—The report of this Committee was approved. The Reference Committee felt it was advisable that a strong Committee be maintained to give continuing advice and guidance as to future policies of the MSMAS.

W. S. Carpenter, M.D.: I move the adoption of the report of your Reference Committee as a whole.

Motion was adopted.

XIII.—4. ON CONSTITUTION AND BYLAWS

XIII—4(a). RESOLUTION RE PROCEDURE IN CASE OF VACANCY ON COUNCIL (ByLaws, Chap. 8, Sec. 10-g)

D. W. Thorup, M.D.: The Reference Committee approved this resolution, but felt that a couple of additions would make it more specific, and consequently added the words "in writing" after the words "shall be notified." It would read: "**All the component societies in the affected Councilor Districts shall be notified in writing of the vacancy.**"

The Reference Committee felt that a time limit was required for the response of the county society, otherwise these could lie around for months without any action, and they specified that **response to this notification shall be forthcoming from the county society within thirty days of receipt of notification.**

The resolution was adopted as amended.

XIII—4(b). DEFERRING ACTION RE DISCIPLINE OF MEMBERS

D. W. Thorup, M.D.: This resolution is one of four related resolutions having to do with changes in the Bylaws in regard to conduct and discipline of members. I don't believe it is possible to consider this resolution alone without some comment, at least, about some of the other or at least one of the other resolutions presented.

The Reference Committee recommends the adoption of this resolution. It is felt that the proposed changes in the Bylaws with regard to conduct and discipline are very well worked out and are deserving of serious consideration, and probably ultimate adoption by this Society.

It is felt, however, that while we are basically in favor of the adoption of the changes or amendments to Chapter 6 of the Bylaws, there are minor differences

in procedures which may be due to local geographic conditions in metropolitan and rural areas, and so on, and that these differences should be ironed out.

Action on those changes and that resolution will follow.

This resolution states, "That action on these proposed amendments be deferred so that each component county society may have an opportunity to recommend such changes as will reflect its experiences and fulfill its needs."

The Reference Committee recommends the adoption of this resolution.

The report of the Reference Committee was adopted.

XIII—(4)c. APPROVAL OF M-E-G COMMITTEE RECOMMENDATIONS

D. W. Thorup, M.D.: It is the recommendation of the Reference Committee that action on Dr. Scott's resolution be deferred for one year, and that each component county society be given an opportunity to study this recommendation.

The recommendation of the Reference Committee is that each component county society refer within six months any suggestions, corrections, additions, deletions, and so on, to the Chairman of The Council, who is then to transmit them through proper channels to the House of Delegates for action at the 1957 meeting.

I so move.

The report of the Reference Committee was adopted.

XIII—4(d). STATE AND COUNTY PREROGATIVES IN DISCIPLINE OF MEMBERS

D. W. Thorup, M.D.: This resolution presented by Dr. Bailey was disapproved.

The report of the Reference Committee was approved by the House of Delegates.

XIII—4(e) MSMS APPROVAL OF COUNTY SOCIETY CONSTITUTIONAL AND BYLAWS PROVISIONS

D. W. Thorup, M.D.: The fourth resolution with regard to the Constitution and Bylaws was read. The amendments are as follows:

"Bylaws:

"Chapter 1, Section 1, which now reads, '. . . and shall in no way be inconsistent with the Constitution and Bylaws of the MSMS,' shall be changed to read, by striking out the word 'and,' '. . . which Constitution and Bylaws shall in no way be inconsistent. . . .'

"Make a new Section 2:

"The constitution and bylaws of each component county society shall receive the approval of The Council of the MSMS, the issuing of a charter being evidence of such approval. Subsequent amendments and revisions of the constitution and bylaws of the county societies shall be submitted to The Council for approval before adoption.

"Change present Section 2 to Section 3."

This resolution was considered seriously by the Reference Committee, and with the advice of legal counsel this resolution was disapproved.

Mr. Speaker, I move its disapproval.

(The motion was put to a vote and was carried, with Dr. Kasper voting "no.")

XIII—4(f). RE MEMBERSHIP IN COUNTY OF PRACTICE

D. W. Thorup, M.D.: The next resolution was presented by Dr. Scher.

The present Bylaws provide simply that a doctor may have membership in a county society other than the one in which he resides or has his office, if it is more advantageous, and with the approval of The Council.

The Reference Committee felt that the present Bylaw in this regard is sufficient, and therefore disapproves of this resolution.

Mr. Speaker, I so move.

F. P. Rhoades, M.D.: Second the motion.

The report of the Reference Committee was adopted.

XIII—4(g). CREATING HOUSE OF DELEGATES REFERENCE COMMITTEE ON NATIONAL DEFENSE AND DISASTER PRACTICE

D. W. Thorup, M.D.:

"Whereas, the Reference Committee on Emergency Medical Service, as provided for in Chapter 8, Section 10-j #13 of the Bylaws is not an accurately descriptive name for the function it is to perform; therefore, be it

"RESOLVED: That Chapter 8, Section 10-j #13 of the Bylaws be amended to read 'National Defense and Disaster Planning'."

That terminology is more in line with modern accepted and universal terminology.

Mr. Speaker, I move the adoption of this resolution.

The motion was put to a vote and was carried unanimously.

D. W. Thorup, M.D.: Mr. Speaker, I move the adoption of the report of the Reference Committee as amended.

E. C. Long, M.D.: Second the motion.

The motion was put to a vote and was carried unanimously.

XIII—5(a) and (b). POSTGRADUATE EDUCATION AND MSMS ATTITUDE TOWARD OTHER HEALING ARTS

Vice Speaker Johnson: We come now to the report of the Reference Committee on Resolutions.

S. L. Loupee, M.D.: Your Reference Committee on Resolutions, composed of seven members, six of whom were present all through the session, took very active interest in what was going on, thoroughly discussed every point, and the work of the Reference Committee was summed up in a comparatively brief report.

However, we do not wish to imply that we want to hurry you in the adoption of anything that will be suggested here, because really we spent a lot of time discussing each and every point.

There were several resolutions pertaining more or less to the same point. One that we discussed first pertained to the question of the recognition of osteopaths within our fold—not exactly that; in fact, the resolution suggested that it be appropriate for physicians to associate with osteopaths in the matter of teaching and consultation.

Then we went on to one of the last resolutions that was introduced. The first resolution was introduced by Dr. Teed, and this resolution concerned osteopaths in Michigan. Another resolution was presented by Dr. Stroup, and that was exactly different in its provisions, but we report them both under the same portion of our report.

Action on these resolutions was postponed pending a report of the Healing Arts Study Committee, which is expected to report in 1957. We were supported in our finding by members of The Council. This portion of the Reference Committee report was adopted.

XIII—5(c). COUNCIL MINUTES TO ALL MSMS DELEGATES

S. L. Loupee, M.D.:

The resolution introduced by Dr. Johnson of Flint, regarding the report of meetings of The Council to members of the House of Delegates: The Reference Committee disapproved this resolution, and pointed out that facilities are now available for the dissemination of such information through the component society's Councilor, as provided in the Bylaws of the Society.

I move the adoption of this portion of the report.
H. J. Meier, M.D.: Second.
The report of the Reference Committee was adopted.

XIII—5(d). REPORT WITHIN SEVEN DAYS OF HOUSE OF DELEGATES PROCEEDINGS

S. L. Loupee, M.D.: We also had a resolution by A. C. Stander, M.D., of Saginaw, regarding the distribution of copies of all resolutions and other pertinent information of each previous meeting, to be available in mimeographed form at the beginning of the next meeting. This resolution was disapproved. In its stead we have a suggestion, but it is not a requirement.
I move disapproval.
R. V. Walker, M.D. (Saginaw): Second the motion.
The report of the Reference Committee was adopted.

XIII—5(e). CONTINUATION OF COUNCILOR CONFERENCES

S. L. Loupee, M.D.: The next resolution that we considered was introduced by Dr. Ryan of Kalamazoo.
The Reference Committee recommends that the House adopt this resolution.
The Report of the Reference Committee was adopted.

XIII—5(f). ESTABLISHMENT OF DEPARTMENT OF GENERAL PRACTICE IN MICHIGAN MEDICAL SCHOOLS

S. L. Loupee, M.D.: Next is a resolution introduced by Dr. Fenton of Wayne, regarding the establishment of Departments of General Practice in the University of Michigan and Wayne State University College of Medicine.
The Reference Committee recommends the adoption of this resolution.
The report of the Reference Committee was approved.

XIII—5(g). COMMITTEE TO STUDY USE OF THE WORD "CLINIC"

S. L. Loupee, M.D.: A resolution was introduced by P. S. Sloan, M.D., of Houghton-Baraga-Keweenaw County Medical Society.
The Reference Committee recommends that this resolution be adopted by the House of Delegates.
The action of the Reference Committee was adopted.

XIII—5(h). EQUAL HEALTH OPPORTUNITIES FOR ALL

S. L. Loupee, M.D.: Next is a resolution that the Michigan State Medical Society record itself as favoring equal health opportunities for all. This is approved by the Reference Committee.
The action of the Reference Committee was approved.

XIII—5(i). PERMANENT ADVISORY COMMITTEE ON FEES

S. L. Loupee, M.D.: This next resolution provides for the establishment of a permanent Advisory Committee on Fees by the Michigan State Medical Society, and that was amended to read, **"That the House of Delegates of the Michigan State Medical Society establish a permanent Advisory Committee on Fees."**

The report of the Reference Committee was adopted as amended.

S. L. Loupee, M.D.: Mr. Speaker, I move the adoption of the report of the Reference Committee as a whole, as amended.

This motion was adopted.

XIII—6. SPECIAL MEMBERSHIPS

D. G. Pike, M.D.: The following names were submitted for retired and life membership and were certified by the Michigan State Medical Society as eligible for these special memberships:
(The list of names submitted for special membership was read.)

Life Membership

Berrien County: Clarence Gillette, M.D.
Genesee County: Henry Cook, M.D.
Ionia County: J. W. C. Fleming, M.D.
Kalamazoo County: U. Sherman Gregg, M.D.
Marquette County: Celestin LeGolvan, M.D., and George M. Waldie, M.D.
Muskegon County: Harry L. Clark, M.D., Marie Keilin, M.D., and Eugene S. Thornton, M.D.
Oakland County: George L. Hagman, M.D., and John K. Ormond, M.D.
Wayne County: Stilson R. Ashe, M.D.; William N. Braley, M.D.; Fritz W. Bramigk, M.D.; Bruno B. Brunke, M.D.; Peter H. Darpin, M.D.; Henri L. Gratton, M.D.; Sarkis K. Keshishian, M.D.; John C. Koch, M.D.; Alfred D. LaFerte, M.D.; Wm. W. MacGregor, M.D.; Emil V. Mayer, M.D.; Wm. R. McClure, M.D.; Carey P. McCord, M.D.; Wm. E. Miller, M.D.; Grover C. Penberthy, M.D.; Lyman J. Pinney, M.D.; Ralph W. Ridge, M.D.; Paul C. Rohde, M.D.; Jacob M. Sutherland, M.D.; and Elmer L. Whitney, M.D.

Retired Membership

Calhoun County: A. D. Sharp, M.D.
Saginaw County: Lloyd A. Campbell, M.D.
Wayne County: Ladislaus Bogusz, M.D.; Clyde H. Chase, M.D.; James C. Danforth, Sr., M.D.; Wirt A. Dawson, M.D.; Frank MacKenzie, M.D.; William D. Ryan, M.D.; and Clarence E. Weaver, M.D.

Associate Membership

Marquette-Alger County: Sara Schweinsberg, M.D.
Muskegon County: Mary Ellen Hennessey, M.D.
Washtenaw County: Malcolm A. Bagshaw, M.D.; Joseph B. Boulos, M.D.; Gerald L. Brody, M.D.; Joseph H. Chandler, M.D.; Norman E. Clarke, Jr., M.D.; Mark A. Everett, M.D.; Norman A. Fox, Jr., M.D.; Robert L. Gillett, M.D.; Glenn G. Golloway, M.D.; Jack E. Goodwin, M.D.; John T. Hayes, M.D.; Erwin P. Hoffman, M.D.; Clifford L. House, M.D.; Edwin M. Hubbard, M.D.; A. Hartwell Jewell, Jr., M.D.; J. A. Arthur Lavigne, M.D.; George E. Lewis, Jr., M.D.; John D. Lynch, M.D.; James W. Mackenzie, M.D.; Henry E. Malcolm, M.D.; Rolf F. Miller, M.D.; Robert F. Muller, M.D.; Paul Natvig, M.D.; Rudolf E. Nobel, M.D.; Leon D. Ostrander, Jr., M.D.; Warren H. Pearse, M.D.; Chrisostomo C. Santos, M.D.; Harry J. Schmidt, M.D.; Russell Scott, Jr., M.D.; Irving Shapiro, M.D.; Edwin M. Smith, M.D.; Philip R. Steinmetz, M.D.; John P. Stewart, M.D.; George R. Thompson, M.D.; Frederik S. Van Reesema, M.D.; Peter D. Vreede, M.D.; Donald J. Holmes, M.D.; Prasana K. Pati, M.D.; John B. Tisserand, M.D.; William S. Wilson, M.D.; and James A. Wood, M.D.
Wayne County: Oscar L. Barland, M.D.; Robert Borchak, M.D.; Richard A. Bruehl, M.D.; John P. Connolly, M.D.; Douglas R. Coyne, M.D.; Leonard Fox, M.D.; Maurice J. Hauser, M.D.; Loyal W. Jodar, M.D.; Benjamin Mihay, M.D.; John H. Schlemer, M.D.; Frederick L. Sperry, M.D.; Bela J. Szappanyos, M.D.; Jerome S. Weingarten, M.D.; Frank A. Weiser, M.D.; Joseph Weiss, M.D.; and Charles R. Williams, M.D.

XIII—6(a). HONORARY MEMBERSHIPS TO J. J. HERBERT AND GORDON H. SCOTT

D. G. Pike, M.D.: By special resolution the names of Dean Gordon H. Scott and Mr. J. Joseph Herbert have been submitted to the Reference Committee on Special Memberships for honorary membership in the Michigan

State Medical Society. The Reference Committee moves that these men be granted honorary membership. I move that this report be accepted by the House of Delegates as a whole.

The report of the Reference Committee was adopted.

XIII—7. ON LEGISLATION AND PUBLIC RELATIONS

The next report is that of the Reference Committee on Legislation and Public Relations.

R. W. Teed, M.D.:

XIII—7(a). THE PRACTICE OF PSYCHOTHERAPY IN THE PRACTICE OF MEDICINE

Resolution introduced by Dr. Barker of Washtenaw County, regarding Opinion No. 2359 of Attorney General Thomas M. Kavanaugh, was approved. The Reference Committee recomemnds that the resolution be called to the early attention of legal counsel of MSMS before copies are mailed to the Governor and to the Attorney General.

I will read only the "Resolved" portion.

"RESOLVED: That the Michigan State Medical Society affirm its stand that the practice of psychotherapy constitutes the practice of medicine, and that Opinion No. 2359 of the Attorney General, concerning the practice of psychotherapeutics, is contrary to the public interest and should be revoked."

I move the adoption of the recommendation of the Reference Committee. The action of the Reference Committee was approved.

XIII—7(b). EXPANSION OF MEDICAL SCHOOL FACILITIES AT WAYNE STATE UNIVERSITY

R. W. Teed, M.D.: Resolution No. 13, submitted by W. S. Reveno, M.D., of Wayne County, regarding funds for the expansion of Wayne State University College of Medicine, was approved by the Reference Committee. The "Resolved" reads as follows:

"RESOLVED: That the House of Delegates of the MSMS respectfully request the Legislature of the State of Michigan to increase its appropriation to Wayne State University College of Medicine by a sufficient amount to allow the expansion."

The action of the committee was approved.

XIII—7(c). REGULATION OF AMBULANCE OPERATION

R. W. Teed, M.D.: Resolution No. 24, from Dr. Bauer of Washtenaw County, regarding hazardous operation of ambulances, was approved, with the recommendation that the resolution be referred further to the Committee on Highway Traffic Safety. I will read the "Resolved."

"RESOLVED: That the MSMS go on record as strongly urging more stringent regulation of ambulance operation by appropriate civil authorities.

The action of the Reference Committee was approved.

XIII—7(d). ADEQUATE FUNDS TO CARRY OUT CIVIL DEFENSE

R. W. Teed, M.D.: Resolution No. 26, submitted by Louis Jaffe, M.D., of Wayne County, requesting appropriation of funds by the state legislature for civil defense, was approved with the following change. The fourth "Whereas" is changed to read as follows:

"Whereas, the Commissioner of Health of the State of Michigan is the designated agent by Public Act 154 dated 1953 to direct medical planning and to integrate medical facilties in the State of Michigan in the event of enemy attack or in national disaster; therefore be it

"RESOLVED: That the Legislature of the State of Michigan be respectfully requested to appropriate annually sufficient funds to accomplish the intent of the law."

The Reference Committee therefore recommends the approval of this resolution as amended.

The action was approved as amended.

XIII—7(e). ANNUAL REGISTRATION OF M.D.'s

R. W. Teed, M.D.: Resolution No. 32, introduced by O. J. Johnson, M.D., of Bay-Arenac-Iosco County, approving the annual registration of doctors, was approved with the change of the suggested fee to $2.

After discussion, the report of the Reference Committee was not adopted.

R. W. Teed, M.D.: Mr. Chairman, I move that the report of the Reference Committee as a whole, as amended, be approved.

The Reference Committee report as amended was approved.

XIII—8. ON MEDICAL SERVICE AND PREPAYMENT INSURANCE

Next is the report of the Reference Committee on Medical Service and Prepayment Insurance.

W. S. Reveno, M.D.:

Dr. Reveno read resolution No. 3, presented by Dr. Blodgett.

XIII—8(a). MMS ANNUAL REPORT TO MSMS HOUSE OF DELEGATES

W. S. Reveno, M.D. (continuing): The Reference Committee deliberated at length on this resolution, and found that there were some confusing statements or declarations in the resolution. For instance, the statement that there is no direct liaison between Michigan Medical Service and the House of Delegates.

Taking that particular incorrect statement into consideration, the Reference Committee redrafted the resolution as presented, and submits the following:

"Whereas, the Michigan State Medical Society established Michigan Medical Service with the intention of providing medical services on a voluntary basis through a prepayment plan, and

"Whereas, the expansion of Michigan Medical Service has become a significant factor in the practice of medicine in the State of Michigan, and

"Whereas, the members of the House of Delegates of the Michigan State Medical Society usually function as the legally qualified members of the corporation of Michigan Medical Service on the second day of their annual meeting and do not have a report submitted along with the reports of other Society activities as published in the Delegates' Handbook; therefore, be it

"RESOLVED: That the annual report of Michigan Medical Service be included in the Handbook for Delegates for informative purposes."

Mr. Speaker, I move the adoption of this resolution as amended.

The substitute resolution was adopted.

XIII—8(b) & (c). COMPREHENSIVE PREPAID MEDICAL CARE PLAN (Lichter and Fryfogle) RESOLUTIONS

W. S. Reveno, M.D.: There were two resolutions, one submitted by Dr. Lichter of Wayne and another by Dr. Fryfogle of Wayne. Both resolutions dealt with comprehensive prepaid medical care plans, and some recommendations to be made for the introduction of investigations toward new types of plans.

The Reference Committee felt there was considerable overlapping in both resolutions, and reframed these two resolutions, combining them into one resolution which reads as follows:

"Whereas, it is the proper role of medicine to as-

sume leadership in determining the type and form of prepaid medical care plans, and

"Whereas, a prepaid medical care plan ideally should embody within it a sense of mutual responsibility on the part of the physician and on the part of the patient, and

"Whereas, a medical care plan should preserve the traditional right of the patient to select the physician of his own choosing; therefore, be it

"RESOLVED: That the Michigan State Medical Society approve exploration with Michigan Medical Service of a comprehensive prepaid deductible and/or co-insurance contract and also the possibility of extension of the present contract; and be it further

"RESOLVED: That the Speaker of this House of Delegates be authorized to appoint forthwith a special committee to accomplish the following:

"A. Meet with the representatives of Michigan Medical Service to study and develop details and mechanisms.

"B. Initiate, as a joint endeavor and in co-operation with Michigan Medical Service, necessary studies to ascertain what would best serve the public.

"C. Prepare a complete report for presentation to the House of Delegates at its meeting in 1957 with the proviso that copies of this report shall be sent to each member of the House of Delegates by August 15, 1957."

Mr. Speaker, I move the adoption of this amended resolution.

J. B. Blodgett, M.D.: I second the motion.

J. E. Hauser, M.D. (Wayne): I would like a definition of the word "comprehensive" in that resolution. Do you mean by that a comprehensive form of insurance, an over-all coverage, covering everything entirely, or is it just a modification? Could the Reference Committee have said "more comprehensive," or does it mean total coverage?

W. S. Reveno, M.D.: The interpretation is that the word "comprehensive" means "inclusive," because the resolution goes on to state as follows, in the original form: "A comprehensive prepaid medical care insurance plan to be developed with the Michigan Medical Service and implemented through a deductible and co-insurance contract."

I think that points the over-all coverage that is implied by the term "comprehensive," and points it in this particular resolution to a deductible and co-insurance contract.

E. F. Fenton, M.D.: Of course there is no such thing as "complete" coverage anywhere in the country, and I doubt if there ever will be. All these plans are of a variable degree of coverage. However, this is quite a variation from what we have had in the past. It is rather a far-reaching thing, and I think everyone should realize what it encompasses.

The present concept of the labor groups, for instance, is for complete coverage. They believe that we should have a service type of policy, such as we have with Blue Shield. This is a departure from that. This entails the spending of a portion of an individual's money for medical care as they go along, and it will cut down some of the over-utilization of the hospitals and other services that may be available.

So, I think in consideration of this matter it is something that will go far beyond anything we have now, and should be considered as such by the House of Delegates.

The Speaker: The Chair would like to point out that the resolution, if voted for, merely approves the exploration of this idea together with Michigan Medical Service. Is there further discussion?

The substitute resolution was put to a vote and was carried unanimously.

XIII—8(d) & (e). URGING TOTAL PARTICIPATION OF M.D.'s IN MMS (HEIDENREICH AND BOWMAN)

W. S. Reveno, M.D.: The Reference Committee mulled over these two resolutions and came up with this resolution which we feel embodies the ideas and ideals presented in the other two:

"Whereas, there is an apparent lack of full understanding and appreciation of the basic principles and philosophy of Michigan Medical Service, and

"Whereas, the survival of the voluntary system of prepayment medical care depends on unity within this State Medical Society; therefore, be it

"RESOLVED: That the House of Delegates recommend to each county medical society that it include in its indoctrination of new members a thorough explanation of the principles, practices and objectives of Michigan Medical Service; and be it further

"RESOLVED: That this State Medical Society, its members and officers, assist each county society in its campaign to see that Michigan Medical Service continues as the most successful medically sponsored prepayment plan."

I move the adoption of this amended resolution.

R. W. Teed, M.D.: I second the motion.

The substitute resolution was adopted.

W. S. Reveno, M.D.: Mr. Speaker, I move the adoption of the entire report as amended.

L. R. Leader, M.D.: I second the motion.

The motion was put to a vote and was carried unanimously.

C. L. Weston, M.D. (Shiawassee): Mr. Speaker, I move we recess.

The motion was severally seconded, was put to a vote, and was carried unanimously.

The meeting adjourned at 11:30 p.m.

TUESDAY MORNING SESSION

September 25, 1956

The meeting reconvened at 9:50 a.m., J. E. Livesay, M.D., Speaker of the House of Delegates, presiding.

XIII—9. ON MISCELLANEOUS BUSINESS

E. G. M. Krieg, M.D. (Wayne):

XIII—9(a). COMMITTEE TO STUDY MSMS FINANCIAL STRUCTURE

The first resolution for your perusal is the report of the Dues and Finance Study Committee, of which Dr. Engelke was Chairman. This report was approved after considerable discussion, with the following additions:

Your Reference Committee realized the immense amount of work contained in this report, and wishes to heartily commend Dr. Engelke and his Committee members for their excellent work.

Your Reference Committee felt that this report was of sufficient importance to recommend that a similar Committee be appointed at three-year intervals.

E. G. M. Krieg, M.D. (continuing): Mr. Speaker, I move the adoption of the report.

R. V. Walker, M.D.: I second it.

The Speaker: Do you all understand the motion? Are you satisfied to take all these recommendations and lump them together? Are there any to which you object, which you would like to vote on individually? The recommendation is for a $5 increase in dues. There is another recommendation that a study committee be appointed every three years.

J. R. Rodger, M.D. (Northern Michigan): May I qualify that statement that a study committee be appointed every three years. Did they mean a study committee of the House?

THE SPEAKER: That is correct.

The motion was put to a vote and was carried unanimously. The report of the Reference Committee was adopted with additional recommendations.

XIII—9(b). SELECTION OF MICHIGAN'S FOREMOST FAMILY PHYSICIAN

E. G. M. KRIEG, M.D.: The next resolution has to do with the nomination of Dr. Joseph H. Sherk of Midland as Michigan's Foremost Family Physician posthumously. This was approved unanimously by your Reference Committee.

Mr. Speaker, I move the adoption of this resolution.

M. J. ITTNER, M.D.: I second the motion.

The action of the Reference Committee was put to a vote and was carried unanimously.

XIII—9(c). ESTEEM OF HOUSE OF DELEGATES FOR THE LATE J. J. HERBERT

E. G. M. KRIEG, M.D.: The resolution of sympathy to the family of Mr. J. Joseph Herbert was approved unanimously.

Mr. Speaker, I move the adoption of this resolution.

The motion was put to a vote and was carried unanimously.

XIII—9(d). APPRECIATION OF THE LATE HENRY A. LUCE, M.D.

E. G. M. KRIEG, M.D.: The resolution in regard to the passing of Dr. Henry A. Luce was approved unanimously.

Mr. Speaker, I move the approval of this resolution.

C. W. OAKES, M.D. (Huron): Second.

The motion was put to a vote and was carried unanimously.

XIII—9(e). NEW MSMS HEADQUARTERS

E. G. M. KRIEG, M.D.: Resolution No. 23, in regard to the building of a new headquarters in Lansing, was approved by your Reference Committee. I will read the "Resolved" portion of the resolution, unless you wish the whole resolution read.

"RESOLVED: That a new MSMS headquarters be built and equipped in Lansing, Michigan; and be it further

"RESOLVED: That for the building of this new headquarters the sum of $300,000 be raised by (1) the sale (at the proper time) of our present headquarters; (2) by the use of present building reserves, and (3) by the increasing of dues in the amount of $5 per year, beginning in the 1957 fiscal year, said increase in dues to be used only for the purpose of defraying the cost of building and equipping a new MSMS headquarters."

Mr. Speaker, I move the adoption of this resolution.

The motion was put to a vote and was carried unanimously.

The action of the Reference Committee was approved.

E. G. M. KRIEG, M.D.: Mr. Speaker, I move that the report of the Reference Committee be adopted as a whole.

H. J. MEIER, M.D.: I second the motion.

The motion was put to a vote and was carried unanimously.

X—39. PLAN FOR EXPEDITING WORK OF THE HOUSE OF DELEGATES

A. C. STANDER, M.D.: Mr. Speaker, I would like to preface this resolution with a few lines from Eddie Guest's poem, and perhaps dedicate it to Dr. Foster:

"Somebody said it couldn't be done;
But he, with a chuckle, replied
That maybe it couldn't,
But he'd be the one
Who wouldn't say so 'til he tried.

"So he buckled right in
With a bit of a grin,
And before you knew it, he'd done it!"

"Whereas, a great amount of time is wasted in each session of the House of Delegates due to the confusion created by the inability of the delegates to comprehend the full meaning of the oral reading of resolutions; therefore, be it

"RESOLVED: That one or more of several procedures be considered and put in effect, as follows:

"1. That the time of resolutions be moved ahead sufficiently to allow either the mimeographing of sufficient copies of the resolution to be furnished to delegates;

"2. Or, the preparation of slides to be projected on a screen during the reading of the reports of the reference committees;

"3. Or, the direct reflection type of screen projector;

"4. Or, any such method that may be devised to carry through the intent and purpose of this resolution."

THE SPEAKER: This will be referred to the Reference Committee on Resolutions.

X—35. COMMITTEE TO STUDY USE OF EXCESS BEDS IN TUBERCULOSIS SANATORIA

W. C. BEETS, M.D. (Kent):

"Whereas, it is evident that there is a continuing decline in the tuberculosis hospitalization requirements in the State of Michigan, and

"Whereas, this has resulted in an excess of beds in tuberculosis sanatoria in practically all areas of the state except the southeastern section, and

"Whereas, there is a tendency at present to utilize these beds for diagnosis and treatment of conditions other than tuberculosis; therefore, be it

"RESOLVED: That the MSMS appoint its own committee to study the problem and to make recommendations for the proper utilization of such excess beds for the public good."

This was referred to the Reference Committee on Hygiene and Public Health.

X—36. MSMS REPRESENTATIVE ON COMMITTEE FOR DRAFTING UNIFORM AUTOPSY CODE

S. E. GOULD, M.D. (Wayne):

"Whereas, the performance of autopsies is of importance in the advancement of medical science and in promoting the welfare and the protection of the public, and

"Whereas, the autopsy is performed in the hospital as a public service, and

"Whereas, problems of an administrative or professional nature occasionally arise in connection with the autopsy as they pertain to funeral directors, and

"Whereas, the Michigan Funeral Directors Association has made it known that it would like to meet with representatives of the Michigan Pathological Society and the Michigan Hospital Association and the Michigan State Medical Society to discuss mutual problems and draw up a code of procedures pertaining to autopsies; therefore, be it

"RESOLVED: That The Council of the Michigan State Medical Society be authorized to appoint a member of the Section on Pathology to represent the Society on a commitee having a representative from the Michigan Hospital Association, the Michigan Pathological Society and the Michigan Funeral Directors Association, to draw up such a code for presentation to The Council for its consideration."

THE SPEAKER: This will be referred to the Reference Committee on Resolutions. (See amendment, page 1540.)

X—37. (MOTION) INFORMATION FROM AMA DELEGATES

R. H. PINO, M.D.: Mr. Speaker, I would like to introduce the following motion. I understand discussion of the motion may be in order when it comes back to the House.

"That through the Department of Public Relations of the Michigan State Medical Society, and at the discretion of The Council, our delegates to the American Medical Association provide material to the members of this House of Delegates indicating the proposals they hope to sponsor in the succeeding annual meeting of the AMA House of Delegates, including national plans.

"That this material be provided to the delegates of the Michigan State Medical Society at least three months in advance of the annual AMA meeting, and that the members of the Michigan State Medical Society House of Delegates furnish to our AMA delegates every possible aid we can to help them and let them know of our thinking."

THE SPEAKER: This will be referred to the Reference Committee on Resolutions.

XIII—10. REFERENCE COMMITTEE ON REPORTS OF THE COUNCIL

E. A. OSIUS, M.D.: Mr. Speaker and Fellow Colleagues:

This delayed appearance is not a staged process, I can assure you. If any of you have any illusions about The Council not doing any work, or the executive office not earning their salaries, I recommend to you a position on the Reference Committee on Reports of The Council, which will immediately disillusion you on that subject.

We have quite a lengthy report, which we took up item by item from the Handbook and the supplementary report of The Council which was read to you yesterday.

The Reference Committee reviewed in detail the reports of The Council, which reflected the tremendous amount of work by The Council and its committees during the past year. This represented a total of fourteen eight-hour days, not counting the time spent in coming and going to the meetings.

A total of 1,056 items were studied as well as the reports of The Council's twenty-nine committees and the Society's nineteen committees.

Membership: We note with pleasure the growth in membership to 6,157.

Finance: The Reference Committee approves the financial work of The Council. The financial report, together with the report of Dr. Engelke's Committee to Study MSMS Financial Structure, assures us that the finances are in good hands and are being ably administered.

THE JOURNAL: The JOURNAL continues to be outstanding among state society journals, and with all this is also able to show a positive balance. The editor, Dr. Wilfrid Haughey, is as usual to be congratulated.

Organization: A review of the chapter on organization reveals the wide-awake and forward-looking attitude of the Michigan State Medical Society to which we are accustomed. The annual county secretaries' meeting over a period of three days; the Tenth Michigan Clinical Institute; the meetings of the delegates to the American Medical Association; the Residents-Interns-Medical Students Conference; the Ninetieth MSMS Annual Session in Grand Rapids; the imposing list of national societies headed by Michigan doctors, and last, but not least, the modern handling of the MSMS membership records by the installation of the IBM machines in the Lansing office, are commended.

The installation of these machines is, of course, to enhance the business details, management, and the collection of vast amounts of information that are being constantly requested by other organizations from the Michigan State Medical Society.

It is intended that the billing for dues can be expeditiously handled in this fashion, along with other benefits. Some of the Reference Committee felt that the billing by the state office might deprive the county societies of some autonomy. However, the majority voted approval of recommendation No. 1, page 81, abolishing the 1 per cent collection credit which is now being granted the county societies for collection of dues.

The Reference Committee believes that the Society should feel indebted to President Jones for the many hours he has spent in visiting personally the many county societies, and we extend to him herewith our sincere thanks for the excellent example that he has set.

C. I. OWEN, M.D. (Wayne): I move that each county society decide for itself whether or not the state shall send the bill for the dues, and that that be the method followed.

F. P. RHOADES, M.D.: I support the motion.

R. W. TEED, M.D.: Mr. Speaker, I think it is obvious that the point hinges on the 1 per cent.

Therefore, I would offer a substitute motion, to the effect that the recommendation of The Council on this matter be accepted, except that the 1 per cent be not eliminated.

A. C. STANDER, M.D.: I second that motion.

THE SPEAKER: All those in favor will say "aye"; opposed, "no." The motion is carried.

E. A. OSIUS, M.D.: *Public Relations.*—The Committee views with gratification the continuing excellent work of the Public Relations Committee, noting particularly the establishment of a public relations library at the headquarters in Lansing, as well as the many hours spent maintaining our contacts with the Legislature, industry, and the public at large, both metropolitan and rural. We are convinced that our public relations department is an outstanding one, of which we may be proud.

Woman's Auxiliary.—The report of the Woman's Auxiliary was approved. The unusual activities and the excellence of the achievements indicate that this aspect of the Society's activities is in good hands. We look forward to next year with anticipation.

Contact with Government Agencies.—Perusal of the paragraph on contact with governmental agencies reassures us that these desirable contacts are being assiduously maintained. The Reference Committee recommends that the sending of representatives of MSMS to Washington on Michigan Day be continued. A good beginning has been made with liaison with the Governor's office, which should be continued and improved.

We welcome the co-operation of the new Secretary of the State Board of Registration in Medicine, Dr. E. C. Swanson of Vassar, and the Commissioner of Health, Dr. A. E. Heustis.

Home medical care for veterans has been continued through the efforts of our officers, thereby maintaining a good relationship with the many veterans residing in this State who need or may need medical care. Many other valuable contacts were also reported, such as the University of Michigan, Wayne State University College of Medicine, Michigan Crippled Children Commission, et cetera.

Contacts with Voluntary Agencies and Organizations.—An excellent example of good public relations is found in the chapter on contacts with voluntary agencies and organizations. The full page advertisement regarding the controversy over Blue Shield and Blue Cross, closer liaison with the State Bar Association, the Operating Room Supervisors Conference, the Medical Assistants Society, and many others, are approved most heartily.

Beaumont Memorial.—The report of The Council on this matter is fully approved. The Reference Committee wishes to call the attention of the delegates to the fact

that there is still a $9.000 deficit outstanding on the building, and that less than 50 per cent of the MSMS members have contributed to this Beaumont Memorial. Not only does this deficit have to be met, but further expenditures for the interior furnishings, the collection of historic specimens and the maintenance of the building and its contacts must be provided for. The Reference Committee agrees with The Council that the possible establishment of a Beaumont Memorial Foundation, with annual dues-paying members, and possibly some help from our Public Relations Department funds might be a solution to this question.

C. J. Bailey, M.D.: I move that a subscription card be sent to those who have not contributed to the Beaumont fund.

F. P. Rhoades, M.D.: I second the motion.

The motion was put to a vote and was carried unanimously.

H. F. Falls, M.D.: I would like to recommend to the Beaumont Memorial Committee that they contact the tourist agencies on Mackinac Island and arrange that they mention a sentence or two about the availability of this facility to the public.

I so move.

S. E. Gould, M.D.: I second the motion.

The Speaker: I will ask for a show of hands. All in favor, raise your hand. Opposed. The motion is lost.

Committees.—A total of eighty-eight meetings of the various committees of the State Medical Society and of The Council were held during the past year. These committees are the backbone and the sign of progress for this Society. Particularly active during the past year were many committees such as Child Welfare, Health and Accident Insurance Policy Control, Rural Medical Service, and many others.

We wish to call attention to the Arbitration Committee which deals with the Uniform Fee Schedule for Governmental Agencies. This fee schedule has not been revised since December 1949, and it is the Reference Committee's opinion that the Committee on Study of Uniform Fee Schedule for Governmental Agencies should be reactivated and the Uniform Fee Schedule for Governmental Agencies should be restudied and revised forthwith.

Annual Reports of Committees of the Council.—The Reference Committee approves the reports of the entire group of committees of The Council, but wishes to comment on a certain few.

One of these is the Committee on Courses on Medical Economics and Ethics, which has done an outstanding piece of work in arranging a large series of lectures to medical students at the University of Michigan. We believe this is an important early contact with young prospective doctors which will place before them some of the socio-economic problems that the medical profession has to solve and is solving. It is a picture painted by actual practicing physicians on the battlefront, and is the type of information which is usually not obtained from a medical school curriculum.

The Reference Committee feels that this good work should continue and be extended even conceivably to other groups of students, possibly even prospective or premedical students. The caliber of men presenting these talks is to be commended, and the time spent by Dr. Teed in arranging this entire course is deeply appreciated by this Reference Committee and, I am sure, by the State Society and its officers.

We also call to your attention the report of the Hospital Relations Committee, which we believe should be called to the attention of every county society; and we call particularly to your attention paragraph 4, page 68, printed in capitalized letters.

The Committee on the Study of Prevention of Highway Accidents is continuing its excellent work in a subject of great public need and interest. We trust that this Committee will continue to expand and to explore new avenues with the idea of promoting greater safety to our citizens while on the road.

We approve the report of the Committee on Study of the Basic Science Act, and commend it for its work, at the same time recalling the large amount of groundwork which previous Committees carried out so well, and to whom some of this credit must go also. The Committee should be continued in order to keep in touch with changing conditions, and the status of the Act and its effect on the profession of this State should be constantly reviewed and surveyed.

F. L. Troost, M.D.: I am sure this session would not be complete without my speaking about the basic science law, although I did not do so last year.

I think the House of Delegates should be apprised of the fact that the changes in the basic science law, as written on page 71 of the Handbook, were not the work of any committee of the Michigan State Medical Society. These changes were brought about over the objections of the State Society through its Basic Science Study Committee, legal counsel and public relations men. It was brought about by a group of doctors in Ingham County, by Dr. Coller, Dr. Masters, Dr. Cawley of Jackson, and others.

As far as our group is concerned, we are well satisfied to let the law stand as it is now, and to offer no further suggestions or amendments until this law has had a chance.

It has accomplished this much: Instead of having three states whose people could come in without basic science examination, we now have twenty-four states, and the list is expanding each day. That is due to a provision in the law that any official examining body in the United States, like any state board of registration, may now have their examination in basic science accepted by the basic science board without further examination. It has resulted in a great many more basic science certificates being issued without examination.

E. A. Osius, M.D.: Another committee which carried on a large amount of work was the Study Committee on Fee Schedules for Michigan Medical Service. This Committee was first assigned to draft a fee schedule for a $6,000 Michigan Medical Service family income service contract. To this was later added consideration of a resolution presented in the House of Delegates in September 1955, on the subject of division of fees, and to this also a re-study of the $5,000 and $2,500 contracts.

To refresh your minds, the resolution requesting the division of fees was as follows:

"RESOLVED: That the President of the Michigan State Medical Society appoint a committee to formulate this procedure (the division of fees), and when the methods are approved by The Council of the Michigan State Medical Society, that they be transmitted to Michigan Medical Service to be made effective; and be it further

"RESOLVED: That due consideration shall be given to the ethical, legal and administrative and other phases involved."

The Committee, with three dissenting votes, recommended that "Whenever more than one doctor of medicine actively and personally participates in any medical treatment of or surgical procedure on a patient for which a single fee is payable by Michigan Medical Service, the doctor in charge of such care shall specify in writing the portion of such fee which has been earned by the assisting or consulting doctors, and inform Michigan Medical Service of the amount thereof. Thereupon, the Michigan Medical Service shall be authorized to allocate and pay the respective portion of the scheduled fee directly to the participating doctors in accordance with such direction."

A careful review by the attorneys for Michigan Medical Service and the State Society's legal counsel has disclosed that this is illegal and unethical, and upon advice by counsel is not in accord with the Judicial Act of the AMA; whereupon, another meeting was

held and, as outlined in the Supplemental Report of The Council, the following resolution was adopted and passed by this Committee:

"Whereas, this Committee has given consideration to various programs or procedures for the accomplishment of the objectives of the resolution of the House of Delegates adopted September 26, 1955, re division of fees, and

"Whereas, this Committee has been charged with responsibility thereby for 'due consideration' of 'ethical, legal, and administrative and other phases involved,' and *has given* due consideration thereto; therefore, be it

"RESOLVED: That the Committee reports to The Council as follows:

"1. The Committee finds it impossible to determine a method of division of its scheduled fees for physicians by Michigan Medical Service as requested, which would be ethical, legal and administratively feasible and conform to opinions of the Judicial Council of the American Medical Association on the subject.

"2. However, the Committee recommends that The Council request Michigan Medical Service to consider the inclusion in its subscribers' certificates of a benefit for the services of assistants in certain defined cases, and payment for such services directly to the assistant."

The $6,000 fee schedule has been studied and prepared by this Committee, but is at present in the hands of The Council for further study. The $5,000 fee schedule was also studied, and it was decided that this should be five-sixths of the established $6,000 fee schedule. It was decided that this was to be arrived at the nearest $5 unless the said fee was lower than the $2,500 lower income group fee schedule. It was felt by this Committee that the $2,500 fee schedule should not be changed. Much actuarial work remains to be done, as a study of this type is long and complicated and has many hidden pitfalls and angles.

Matters Referred to the Council by the 1955 House of Delegates.—The Reference Committee approves the report of The Council in regard to these matters outlined on pages 78, 79, 80 and 81 of the Handbook, among which are included: Cancer quackery; possible optometric legislation; pollution of inland waterways; screening of foreign interns; periodic health examinations by hospital staffs; examination of the mentally ill, and others.

Item 11 regarding surgical fees has been covered elsewhere.

E. A. Osius, M.D.: If I seem to read too rapidly, Dr. Johnson, I am sorry. I didn't intend to.

Recommendations.—Recommendations Nos. 1, 2, 3, 6, 7, 8 and 9 are approved by this Reference Committee. Some of these have been covered by resolutions already introduced into the House. In regard to No. 4, the Reference Committee recommends that the House of Delegates instruct The Council to study and revise as necessary the Uniform Fee Schedule for Governmental Agencies forthwith.

We call particular attention to No. 8(b) which would require an amendment to the Bylaws, and the Reference Committee recommends the adoption of No. 8(b).

Supplemental Report of The Council.—This report was read to the delegates by the Chairman of The Council, Dr. Bruce Wiley, yesterday, and the Reference Committee approves items Nos. 1, 2, 3, 4, 5, 6, 7 and 8. Item No. 9, the poll on social security, is inconclusive and hence no opinion can be rendered.

Item No. 10, which deals with medical care for military dependents, is approved in its basic tenets. The Reference Committee approves The Council's firm stand regarding the Governor's Study Commission on Prepaid Hospital Care Plans.

Item No. 12: This paragraph deals with the future expansion of the Michigan State Medical Society as regards a new building to enhance the professional and business efficiency of the administrative staff, and it is the Reference Committee's opinion that this is a necessary and important step which should be consummated as soon as possible, but with careful consideration and every possible foresight to take care of possible future contingencies. We recall to your minds a resolution already presented on this floor in regard to a building fund.

Item No. 13: The Reference Committee approves the report of the Liaison Committee with Michigan Hospital Service, as well as item No. 14 dealing with the placement of physicians throughout the State.

Item No. 15 has been dealt with elsewhere.

Item No. 16: Annual Reports of Committees of The Council. Six additional reports were submitted to The Council, and these were considered by the Reference Committee, selecting the salient and important features of each one for comment.

We approved the recommendation of The Council that the position of Executive Secretary of the State Board of Registration in Medicine be a full-time position with an adequate salary, and respectfully request such action in proper form from the Legislature. The Reference Committee also approved the conservative action of The Council on the report of the Healing Arts Study Committee. The report of the Committee on Closed Panel Practice has been covered in a resolution presented to the House.

In a supplementary report on Michigan Medical Service, several problems were presented, which are still under study and not yet ready for presentation.

The Reference Committee commends the report of the Liaison Committee with the Michigan Social Welfare Department, and recommends that it receive attention by each county society as published in The Journal of MSMS.

The Committee on Rural Medical Service has reported on many activities, including the medical school deans' panel, M.D. Placement program, federal funds for health centers, subsidizing home nursing plans in rural areas, scholarship funds for medical students, et cetera. Several other items still require further study.

The meeting was adjourned at 2:30 a.m.

Mr. Speaker, I move the adoption of this report as a whole, as amended.

W. W. Babcock, M.D.: Second the motion.

A. C. Stander (Saginaw): I would like to move that not only does MMS consider the establishment of an assistant's fee, but also that they reconsider the possibilities of the division of fees.

The Speaker: You are moving an addition to the motion of the Fee Study Committee. Would you like that read again? "However, the Committee recommends that The Council request Michigan Medical Service to consider the inclusion in its subscribers' certificates of a benefit for the services of assistants in certain defined cases, and payment for such services directly to the assistant."

The motion is to include the additional language that they also reconsider the possibility of division of their fees for assistants.

Is there a second?

O. J. Johnson: I second that.

The Speaker: All those in favor will say "aye"; opposed, "no." The motion is lost.

Now we are back to the motion to approve the report of the Reference Committee as amended.

The motion was put to a vote and was carried unanimously.

X—38. APPRECIATION TO HARVEY V. HIGLEY, VA ADMINISTRATOR

D. R. Smith, M.D.: This is a resolution of appreciation to Harvey V. Higley, Administrator of Veterans' Affairs.

"Whereas, the Hometown Care for Veterans Plans of the Veterans Administration was originally developed with the assistance of the Michigan State Medical Society and Michigan Medical Service, and

"Whereas, this program was placed in jeopardy by the projected action of a department of the Veterans Administration, and

"Whereas, the personal intervention of Mr. Higley resulted in the maintenance of the present program in Michigan; therefore, be it

"RESOLVED: That this House of Delegates express its appreciation to Mr. Harvey V. Higley, Administrator of Veterans' Affairs, for his prompt and meritorious action."

This was referred to the Reference Committee on Legislation and Public Relations.

C. I. Owen, M.D.: I move that we recess.

The motion was severally seconded, was put to a vote, and was carried unanimously.

(The meeting was recessed at 11:45 a.m.)

TUESDAY EVENING SESSION

September 25, 1956

The final session convened at 8:15 p.m., J. E. Livesay, M.D., Speaker of the House of Delegates, presiding.

XIII—7(e). ANNUAL REGISTRATION OF M.D.'s (Reconsideration)

O. K. Engleke, M.D. (Washtenaw):

I would like to move that the vote on the resolution re Annual Registration of M.D.'s be considered at this time.

R. W. Teed, M.D.: Second the motion.

The motion is lost by a vote of 32 "yes" and 50 "no."

The action that was taken previously will stand.

(Vice Speaker Johnson assumed the Chair.)

Vice Speaker Johnson: We will consider supplementary reports of reference committees at this time.

XIII—5(j). SUBMISSION OF HOUSE OF DELEGATES RESOLUTIONS IN ADVANCE

S. L. Loupee, M.D.:

The Reference Committee reports on resolution No. 34, introduced by Dr. O. J. Johnson, as follows:

The above resolution as presented was disapproved by the Reference Committee, although the Committee highly endorses the sentiments expressed therein and recommends that The Council give full consideration to the problem presented. It is our hope that The Council will be able to provide the delegates with copies of a majority of the resolutions before or at the opening of the 1957 session.

I move the adoption of this report, Mr. Chairman.

Chairman Johnson: The motion is to disapprove the resolution. Is there a second?

E. G. M. Krieg, M.D.: I second the motion.

Chairman Johnson: Now we will vote on the motion to adopt the report of the Reference Committee, which is to disapprove this resolution.

The motion was put to a vote and was carried unanimously.

XIII—5(k). MEDICAL CLASSES AT UNIVERSITY OF MICHIGAN AND WAYNE STATE UNIVERSITY TO SEND REPRESENTATIVES TO HOUSE OF DELEGATES SESSION

S. L. Loupee, M.D.: The next resolution in order is No. 35, presented by Dr. Falls.

"Whereas, it is the avowed policy of the Michigan State Medical Society to disseminate information, to present and future physicians, pertaining to medical economics, medico-legal and other aspects of medicine, and

"Whereas, the orientation of medical students in such subjects is a highly desired objective of this policy; be it, therefore,

"RESOLVED: That the House of Delegates invite each junior and senior medical class of Wayne State and the University of Michigan to elect three delegates to attend the House of Delegates session, and that these representatives serve without vote but participate fully in all the functions of this organization; and be it further

"RESOLVED: That the expenses of such delegates be defrayed by the Michigan State Medical Society."

I move the adoption of this resolution.

R. W. Teed, M.D.: Second the motion.

Approved as amended.

XIII—5(l). PLAN FOR EXPEDITING WORK OF HOUSE OF DELEGATES

S. L. Loupee, M.D.:

Resolution No. 36 was introduced by Dr. Stander. This resolution was disapproved because action on similar proposals has been taken previously by this Reference Committee.

(Dr. Loupee read resolution No. 36, submitted by Dr. A. C. Stander.)

J. M. Wellman, M.D.: May I speak to the problem before the House at the present time? I am a member of this Reference Committee. As I recall the resolution introduced by Dr. Stander this morning, calling for the various alternatives in which material contained in resolutions presented to this House of Delegates was disapproved, the Reference Committee recommended that there was enough merit in having this material available. Recognizing that it is an administrative problem, the Reference Committee recommended that The Council investigate methods by which material contained in resolutions could be presented to this House of Delegates for consideration and report back next year.

Chairman Johnson: I would be very happy to accept that as a motion, Dr. Wellman, if you will make it in that fashion.

J. M. Wellman, M.D.: I so move.

S. L. Loupee, M.D.: I second it.

The motion was put to a vote and was carried unanimously.

XIII—5(m). MSMS REPRESENTATIVES ON COMMITTEE DRAFTING UNIFORM AUTOPSY CODE

S. L. Loupee, M.D.: The Reference Committee reports as follows on resolution No. 38.

This resolution was approved by the Reference Committee in principle, but a change in wording is proposed as an amendment to this resolution, namely:

"RESOLVED: That The Council of the Michigan State Medical Society be authorized to appoint two members of the State Medical Society, one a family physician and one a member of the Section on Pathology, to represent the Society on a committee consisting of a representative from the Michigan Hospital Association, the Michigan Pathological Society and the Michigan Funeral Directors Association, to draw up such a code for presentation to The Council for its consideration."

I offer this and move its adoption.

W. S. Reveno, M.D.: Second the motion.

The motion was put to a vote and was carried unanimously.

Approved as amended.

XIII—5(n). INFORMATION FROM AMA DELEGATES

S. L. Loupee, M.D.: The Reference Committee revamped the motion and presents it in this form for your consideration:

This motion as written was disapproved, but your Reference Committee is in sympathy with its sentiments, and wishes to recommend that the report of the delegates to the AMA, presented at the annual session of the MSMS House of Delegates, be submitted in two parts: (1) A summarization of the past year's activities; (2) a summarization of their proposals, to be submitted for consideration at the next general session of the House of Delegates of the AMA."

Mr. Chairman, I move the adoption of the Reference Committee's report.

R. F. Fenton, M.D.: Second the motion.

R. L. Novy, M.D.: I move that this motion be tabled.

E. G. M. Krieg, M.D.: I second that.

(The motion to table was put to a vote and was carried unanimously.)

XIII—5(o). APPRECIATION TO HARVEY V. HIGLEY

S. L. Loupee, M.D.: We have one more resolution, No. 40, introduced by Dr. Smith. Mr. Chairman, I move the adoption of this resolution.

E. G. M. Krieg, M.D.: Second.

The motion was put to a vote and was carried unanimously.

The action of the Reference Committee was approved.

S. L. Loupee, M.D.: Mr. Chairman, I move the adoption of the report of the Reference Committee on Resolutions, including everything that was adopted piecemeal yesterday and today.

(The motion was severally seconded, was put to a vote, and was carried unanimously.)

(The Speaker resumed the Chair.)

XIII—11. COMMITTEE TO STUDY USE OF EXCESS BEDS IN TUBERCULOSIS SANATORIA

The Speaker: *Report from the Reference Committee on Hygiene and Public Health.* Dr. Molner.

J. G. Molner, M.D.: There is a time when simplicity arrives, and I think this is that time.

This resolution was introduced by Dr. W. C. Beets of Kent County and was referred to our Reference Committee. Participants in this resolution were all invited to attend our meeting, and are in accord with our finding.

(Dr. Molner read resolution No. 37, submitted by Dr. Beets.)

J. G. Molner, M.D.: I move the adoption of this resolution, Mr. Speaker.

E. G. M. Krieg, M.D.: Second the motion.

The motion was put to a vote and was carried unanimously.

XIV—ELECTIONS

XIV—1. COUNCILOR, 1ST DISTRICT

A. E. Schiller, M.D., of Detroit, is the incumbent.

J. G. Bielawski, M.D. (Wayne): Mr. Speaker, I move the nomination of Dr. Schiller of Detroit.

The Speaker: Dr. Schiller has been nominated to succeed himself. Are there other nominations?

E. H. Lauppe, M.D. (Wayne): I second the nomination of Dr. Schiller.

J. G. Bielawski, M.D.: I move that nominations be closed and that the Secretary be instructed to cast the unanimous ballot for Dr. Schiller.

This motion was seconded and was carried unanimously.

The Speaker: Dr. Schiller is re-elected.

XIV—2. COUNCILOR, 4TH DISTRICT

Nominations are in order for Councilor from the 4th District. Ralph W. Shook, M.D., Kalamazoo, incumbent.

S. L. Loupee, M.D.: Mr. Speaker and members of the House, it is my pleasure and privilege to nominate as Councilor from the 4th District Ralph W. Shook, M.D., of Kalamazoo, who has very ably filled that position for the last several years and who has even visited the component societies frequently and co-operated with us in making our agencies operate well.

D. W. Thorup, M.D.: I second the nomination.

F. C. Ryan, M.D.: I move that nominations be closed and that the Secretary be instructed to cast the unanimous ballot. This motion was seconded and carried unanimously.

The Speaker: Dr. Shook is re-elected.

XIV—3. COUNCILOR, 5th DISTRICT

The floor is now open for nominations for Councilor from the 5th District. J. D. Miller, M.D., incumbent.

R. E. Rice, M.D.: Mr. Speaker, as J. D. Miller will not be continuing as Councilor, it is my privilege to nominate Dr. C. Allen Payne of Grand Rapids, Kent County.

Dr. Payne was born in Laurium, Michigan, in March, 1909. He took his premedical training at Hahneman College of Science, receiving his B.S. degree in 1931. He attended the Hahneman Medical College in Philadelphia, receiving his M.D. degree in 1933. He then interned in the Miami Valley Hospital, Dayton, Ohio, 1933-34.

He was a resident in pathology at Methodist Hospital, Indianapolis, in 1934-36, and at the Henry Ford Hospital, Detroit, in 1936-38, receiving his M.S. in pathology in 1938 from the Wayne State University, Detroit.

He has been the pathologist at Blodgett Hospital, Grand Rapids, since 1938. This was interrupted by military service from 1942 to 1946, when he was the pathologist for the Harper Hospital Unit, U. S. Army in the European theater.

He is a past president of the Kent County Medical Society, present chairman of the Michigan Cancer Coordinating Committee, past president of the Michigan Pathological Society, and represents the American Pathological Society in Michigan. He is a member of the founding committee of the Michigan Association of Blood Banks, and conducted mass blood typing for the Kent County Medical Society.

He is the author of a number of professional articles.

For the past four years he has been chairman of the MSMS Public Relations Committee. He has done an outstanding job in this field throughout the state, and has provided leadership in numerous county secretary and public relations conferences. His participation in these activities has resulted in a valuable understanding of the workings of our State Society.

Mr. Speaker, it is my distinct privilege to nominate C. Allen Payne, M.D., for Councilor of the Fifth District.

K. E. Fellows, M.D. (Kent): I second the nomination.

Paul Ivkovich, M.D.: I move that nominations be closed and that the Secretary cast the unanimous vote. The motion was seconded and carried unanimously.

The Speaker: Dr. Payne is elected.

XIV—4. COUNCILOR, 6TH DISTRICT

The floor is now open for nominations for Councilor from the 6th District. H. H. Hiscock, M.D., of Flint, incumbent.

C. W. Colwell, M.D. (Genesee): I would like to nominate Dr. Hiscock to succeed himself.

O. J. Johnson, M.D.: I would like to second the nomination of Dr. Hiscock.

E. C. Texter, M.D.: I move that nominations be closed and that the Secretary cast the unanimous ballot for Dr. Hiscock.

The motion was severally seconded, was put to a vote, and was carried unanimously.

The Speaker: Dr. Hiscock is re-elected.

XIV—5. DELEGATES TO AMA

The Speaker: Next is the election of delegates to the AMA. There are three incumbents, and three to be elected. They are W. D. Barrett, M.D., Detroit; W. H. Huron, M.D., Iron Mountain, and R. L. Novy, Detroit.

W. L. Brosius, M.D. (Wayne): Mr. Speaker and members of the House, we have had considerable discussion about our delegates to the AMA. I am not going to bore you at this late hour with a burst of oratory, but I think something should definitely be pointed out.

Our delegates to the AMA should be men who would represent this group in their business, in their deliberations, for the furtherance of the good of medicine in Michigan and in general.

I would like to place in nomination the name of a man who does know his way around. He has had experience which he has gained on the ground. We all trust him. We all like him. He is a personal friend.

I nominate Wyman D. Barrett.

J. E. Croushore, M.D. (Wayne): I would like to second Dr. Brosius' nomination of Dr. Barrett as delegate to the AMA.

W. S. Reveno, M.D.: I would like to place in nomination the name of Dr. R. L. Novy of Detroit, present incumbent, to the House of Delegates of the AMA.

L. J. Bailey, M.D.: It is redundant to speak about Dr. Novy's qualities, but I should like to second his nomination.

D. R. Smith, M.D.: I would like to nominate Dr. W. H. Huron. Dr. Huron has been a delegate to the AMA for eight years, and is the present incumbent.

J. M. Wellman, M.D.: Mr. Speaker, I would like to second the nomination of Dr. Huron as delegate to the AMA.

W. L. Brosius, M.D.: I move that nominations be closed and that the Secretary cast the unanimous ballot for all three incumbents.

The motion was seconded, put to a vote and was carried unanimously.

The Speaker: These three delegates are elected by acclamation.

XIV—6. ALTERNATE DELEGATES TO AMA

The Speaker: The next item of business is the election of alternate delegates to the AMA. The incumbents are G. W. Slagle of Battle Creek, William Bromme of Detroit, and J. R. Rodger of Bellaire.

H. C. Hansen, M.D. (Calhoun): It gives me great pleasure to nominate Dr. George W. Slagle to succeed himself, as alternate delegate.

J. P. Markey, M.D. (Saginaw): I second the nomination.

C. I. Owen, M.D.: It gives me pleasure to nominate Dr. William Bromme for alternate delegate, to succeed himself. He is well known to all of us, and he is recommended by the Wayne delegation.

E. G. M. Krieg, M.D.: Mr. Speaker, I am pleased to second that nomination.

O. J. Johnson, M.D.: I would like to place in nomination the incumbent, John R. Rodger.

Frank Ivkovich, M.D.: I second the nomination.

E. G. M. Krieg, M.D.: I move that nominations be closed.

The motion was seconded, put to a vote and was carried unanimously.

Subsequently, the Speaker announced (after the balloting) that Alternate Delegates were elected in the following order of seniority: One, Dr. Bromme; two, Dr. Rodger; three, Dr. Slagle.

XIV—7. PRESIDENT-ELECT

The Speaker: The next item of business is the election of a President-elect.

J. R. Rodger, M.D.: Mr. Speaker, we in this House know that the top responsibility for the business of this State Society is not handled by just one man but is shared by a group of men. However, the public does not realize this, and in the eyes of the public the man who happens to be President of the Michigan State Medical Society is Mr. Michigan State Medical Society as far as they are concerned.

Therefore, in selecting a President I think it behooves us to occasionally select one of the younger age group to demonstrate to the public that we have younger leadership as well as older leadership in our Society. We must do this in relation to selecting a man who cannot only do that before the public, but who can also ably represent us in the responsibilities he must have as President.

Therefore, we look back over the history of the Society and find that in the past we have done just that. If we look over the list of our Past Presidents it is interesting to note that two of the men who were Presidents of this Society in the 1920s are still alive and still going strong, and four of the men who were Presidents of this Society in the 1930s are still alive and some are still going strong. One of them sat in this session yesterday and today. Those men must have been young men when they were President of the Michigan State Medical Society.

Therefore, I would like to place in nomination the name of a man who is in this younger age group, a man who I feel sure can not only represent our interests in the office of President, but in the eyes of the public, one who will demonstrate that we have younger as well as older leadership.

I would like to present the name of a man who has been a member of this House, who has been a member of The Council since 1950, who has been on the Board of Michigan Medical Service since 1953, and who at the present time is on the Executive Committee of Michigan Medical Service.

I am proud to present to this body the name of George W. Slagle, M.D., of Battle Creek, as President-elect.

J. P. Markey, M.D.: Mr. Speaker and members of the House of Delegates, it is my pleasure to present in nomination the name of a man who has been a member of the House of Delegates for many years and who has served on The Council for eight years.

He is a Past President of his County Medical Society. He is a quiet, pleasant gentleman, who will place a hand on your shoulder, whether you are a young or an old practitioner of medicine, and who will counsel with you.

I nominate Lloyd C. Harvie, M.D., of Saginaw.

Frank Ivkovich, M.D.: I move that nominations be closed.

The motion was seconded, put to a vote and was carried unanimously.

Subsequently, the Speaker announced (after the balloting) that Dr. George W. Slagle was elected.

Lloyd C. Harvie, M.D. (Saginaw): Mr. Speaker, I would like to thank the men who supported me, and congratulate Dr. Slagle, and assure him of my wholehearted support, and I wish him the best of luck. (Applause).

George W. Slagle, M.D. (Calhoun): Mr. Speaker and delegates, I am deeply grateful. It is with fear and trepidation that I assume and hope to carry out this high honor that you have given me. The shoes that I am expected to fill are tremendous, both literally and figuratively. (Laughter).

I thank you very much, and I hope that I can carry on in the best traditions of the Michigan State Medical Society. Thank you very much for this high honor. (Applause).

The Speaker: At this time we would like to honor the Past Presidents of the Michigan State Medical Society who are present this evening. As I read their names, we would like them to come up and fill this spot right in front of us, and remain there for the rest of the session.

(The Past Presidents in attendance were introduced.)

XIV—8. SPEAKER OF HOUSE OF DELEGATES

The Speaker: The next order of business is the election of a Speaker of the House of Delegates.

C. K. Stroup, M.D.: I nominate the present Vice Speaker, Dr. K. H. Johnson.

J. R. Heidenreich, M.D.: I move that nominations be closed and that the Secretary cast the unanimous ballot.

(The motion was severally seconded, was put to a vote, and was carried unanimously.)

The Speaker: Dr. Johnson, it is a very nice thing to be able to present to you this piece of jewelry, which says "Speaker of the House of Delegates."

Vice Speaker Johnson: Thank you, Dr. Livesay. I am sure you will all agree when I say that if I can do half as good a job as Jack Livesay has done during his term as Speaker, I will have done an excellent job.

Thank you very much. (Applause).

XIV—9. VICE SPEAKER OF HOUSE OF DELEGATES

The Speaker: The next order of business is the election of a Vice Speaker of the House of Delegates.

J. B. Blodgett, M.D.: Mr. Speaker, I would like to nominate for Vice Speaker Dr. James J. Lightbody, of Wayne. Dr. Lightbody is a past president of the Wayne County Medical Society and, by the way, at that time was one of the youngest Presidents. He is a past chairman of our Board of Trustees. He is presently an editor of the *Detroit Medical News,* where he presents his ambivalent personality in the column, "Rant and Rave." He is Medical Director of the Michigan Chapter of the Arthritis and Rheumatism Foundation, and he has been a delegate to this House for the past ten years.

It is a privilege to place his name in nomination.

W. S. Reveno, M.D.: Mr. Speaker, I would like to second the nomination of Dr. Lightbody as Vice Speaker of the House.

F. P. Rhoades, M.D.: I move that nominations be closed and that the unanimous ballot be cast for Jim Lightbody.

The motion was seconded, put to a vote and was carried unanimously.

The Speaker: Dr. Lightbody is elected.

You don't remember it, Jim, but you were the fellow who nominated me. See what you've gotten yourself into! Congratulations. (Applause).

James Lightbody, M.D. (Wayne): Mr. Speaker and members of the House, it is a coincidence, I presume, that Jack is Speaker at a time when I am just being elected as Vice Speaker. I want to say that Jack has done a tremendous job, and deserves all the acclamation that we can possibly give him.

This afternoon I was just a happy, carefree delegate, and now I really have got myself into something (Laughter). I want to assure you that I fully appreciate the responsibility of this job, and I assure the newly elected Speaker of my full co-operation. I hope that I will be able to uphold the dignity of this job and be as unprejudiced as all of the previous Speakers have been.

Thank you very much. (Applause).

The Speaker: It is always hard to express at this time each year the appreciation for all the help that the Speaker has had in making this House of Delegates run smoothly. I refer especially to Dr. Johnson, who has been a tremendous help, and I am sure you are going to have a very loyal servant in Dr. Johnson.

Also, to the staff of the central office; to Dr. Foster, Mr. Burns, Mr. Brenneman, and the secretarial help, not to mention Mrs. Emmons, who sits so calmly through all these long sessions.

I think this has been a successful meeting of our House of Delegates. I was very impressed when Mrs. Emmons, our stenotypist, told me before the session opened this evening that so far seventy-six different doctors have spoken on the floor of the House of Delegates out of around 100. I think that speaks well for democracy in the House of Delegates of the Michigan State Medical Society.

It has been a great pleasure to serve as your Speaker, and I am sure it will be a great pleasure to use some of my leisure time leisurely as well.

XIV—10. COUNCILOR, 3RD DISTRICT

S. A. Fiegel, M.D.: With the election of Dr. Slagle as President-elect it leaves a vacancy in the Councilorship of the 3rd District.

In his stead I would like to place in nomination a hard worker from the 3rd District, a man who has been a member of the Public Relations Committee since its inception, who has worked very diligently in the 3rd District and in the House of Delegates for any number of years—I can't tell you how many. That man is H. J. Meier, of Coldwater, Branch County.

S. E. Andrews, M.D. (Kalamazoo): I would like to second that nomination.

H. C. Hansen, M.D.: Mr. Speaker, I want to second the nomination of Dr. Meier, also, as a delegate from Calhoun County with my associates, Drs. Hubly and Keagle. It is our unanimous opinion that he should be appointed.

I wish to move to close nominations.

The Speaker: Dr. Hansen moves that nominations be closed and that the Secretary cast the unanimous ballot for Dr. Meier.

The motion was seconded, put to a vote and was carried unanimously.

The Speaker: Dr. Meier, you are the new Councilor from the 3rd District.

This ninety-first session of the House of Delegates stands adjourned.

(The meeting adjourned *sine die* at 10:20 p.m.)

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NEWS MEDICAL

MICHIGAN AUTHORS

Thomas J. Heldt, M.D., Detroit, is the author of an article entitled "Some Historical Reminders in Hospitalization," published in the *Henry Ford Hospital Medical Bulletin,* September, 1956.

W. D. Butt, M.D., Detroit, is the author of an article entitled, "Rigid Wire Fixation of Fractures of the Hand," published in the *Henry Ford Hospital Medical Bulletin,* September, 1956.

George L. Waldbott, M.D., Detroit, is the author of an article entitled, "The Allergic Aspect of Pruritus Ani and Vulvae," published in *GP,* October, 1956.

Andrew H. Veldhuis, M.D., L. A. Swinehart, M.D., and **L. E. Preuss, M.S.,** Detroit, are the authors of an article entitled, "The Use of Radioactive Gold in the Treatment of Cancer of the Cervix," published in the *Henry Ford Hospital Medical Bulletin,* September, 1956.

Brenton M. Hamil, M.D., Detroit, is the author of an article entitled, "Reticuloendotheliosis," published in the *Henry Ford Hospital Medical Bulletin,* September, 1956.

Jack S. Guyton, M.D., Detroit, is the author of an article entitled, "Differential Diagnosis of Collagen Diseases," published in AMA *Archives of Ophthalmology,* October, 1956.

V. Everett Kinsey, Ph.D., Detroit, with the assistance of **June Twomey Jacobus, N.A.,** Detroit, and **F. M. Hemphill, Ph.D.,** Ann Arbor, is the author of an article entitled "Retrolental Fibroplasia," published in AMA *Archives of Ophthalmology,* October, 1956.

Leroy C. Harris, Jr., M.D., John C. Parry, M.D., and **F. E. Greifenstein, M.D.,** Detroit, are the authors of an article entitled "Dyclonine—A New Anesthetic Agent: Clinical Evaluation," published in *Anesthesiology,* September-October, 1956.

Clifford W. Gurney, M.D., and **Robert J. Bolt, M.D.,** Ann Arbor, are the authors of an article entitled "The Simultaneous Use of Chromium Labeled Erythrocytes and I-131 Tagged Human Serum Albumin in Blood Volume Determinations," published in the *University of Michigan Medical Bulletin,* August, 1956.

John V. Verner, Jr., M.D., H. Phil Gross, M.D., and **John M. Weller, M.D.,** Ann Arbor, are the authors of an article entitled "Pneumococcal Meningitis Treated with Hydrocortisone, ACTH, and Antibiotics," published in the *University of Michigan Medical Bulletin,* August, 1956.

Peter A. Martin, M.D., Detroit, is the author of an article entitled "Note on Inhibition of Scientific Productivity," published in the *Psychoanalytic Quarterly,* XXV: 415-417, 1956.

Victor R. Jablokow, M.D., Detroit, and **Robert G. Stineman, M.D.,** Evanston, Illinois, are the authors of an article entitled "Perforation of the Interventricular Septum with Right Bundle Branch Block," published in *American Practitioner and Digest of Treatment,* October, 1956.

John A. Churchill, M.D. and **Salvador Gonzalez, M.D.,** Detroit, are the authors of an article entitled, "The Worth of Serial Electroencephalograms," published in the *Henry Ford Hospital Medical Bulletin,* September, 1956.

E. A. Irvin, M.D., Detroit, is the author of an article entitled "Industrial Placement of the Physically Handicapped," part of the Symposium on Rehabilitation of the Injured Workers presented at the Thirty-third Annual Session of the American Congress of Physical Medicine and Rehabilitation, held in Detroit in August, 1955, and published in the *Archives of Physical Medicine and Rehabilitation,* October, 1956.

Alma J. Murphy, Ph.D., Norman S. Talner, M.D., and **David G. Dickinson, M.D.,** Ann Arbor, are the authors of an article entitled "Glossopharyngeal Breathing in the Management of the Chronic Poliomyelitic Respirator Patient," read at the Thirty-third Annual Session of the American Congress of Physical Medicine and Rehabilitation, held in Detroit in August, 1955, and published in the *Archives of Physical Medicine and Rehabilitation,* October, 1956.

John T. Ferguson, M.D., and **Frank V. Z. Linn, M.D.,** Traverse City, are the authors of an article entitled "A New Compound for the Symptomatic Treatment of Tension and Anxiety: 2-Ethylcrotonylurea (Nostyn)," published in *Antibiotic Medicine and Clinical Therapy,* October, 1956.

Andrew H. Veldhuis, M.D., Laymond A. Swinehart, M.D., Luther E. Preuss, M.S., and **C. Paul Hodgkinson, M.D., F.A.C.S.,** Detroit, are the authors of an article entitled "Experimental Studies on Interstitial Injection of Radioactive Colloidal Gold (AU 198)," published in *Surgery, Gynecology and Obstetrics,* November, 1956.

Capt. Robert W. Gillespie (MC), U.S. Army, Wayne W. Glas, M.D., George H. Mertz, M.D., Eloise, and **Merle M. Musselman, M.D.,** Omaha, are the authors of an article entitled "Richter's Hernia," read at the Thirteenth Annual Meeting of the Central Surgical Association, Rochester, Minnesota, February, 1956, and published in the AMA *Archives of Surgery,* October, 1956.

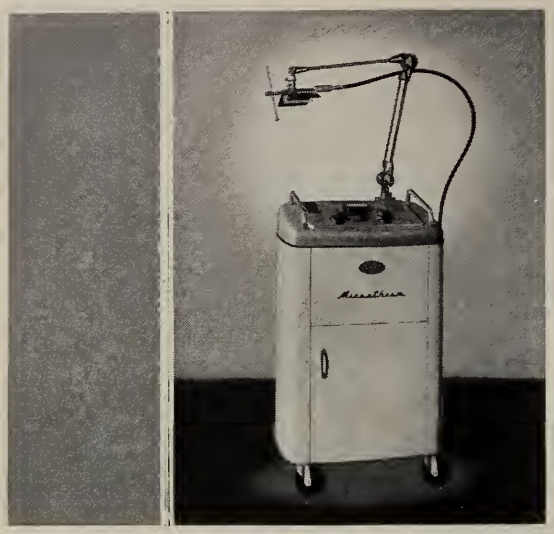
Joseph L. Posch, M.D., Detroit, is the author of an article entitled "Primary Tenorrhapies and Tendon

(Continued on Page 1546)



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MICHIGAN AUTHORS

(Continued from Page 1544)

Grafting Procedures in Hand Injuries," read at the Thirteenth Annual Meeting of the Central Surgical Association, Rochester, Minnesota, February, 1956, and published in the AMA *Archives of Surgery,* October, 1956.

M. A. Block, M.D., B. E. Brush, M.D., J. L. Ponka, M.D., and **R. J. Priest, M.D.,** Detroit, are the authors of an article entitled "The Diagnosis of Postcholecystectomy Biliary Tract Stones," read at the Thirteenth Annual Meeting of the Central Surgical Association, Rochester, Minnesota, February, 1956, and published in the AMA *Archives of Surgery,* October, 1956.

John W. Ditzler, M.D. and **Gene McIvor, M.D.,** Detroit, are the authors of an article entitled "Paraplegia Following General Anesthesia," published in *Current Researches in Anesthesia and Analgesia,* September-October, 1956.

Henry T. Johnson, M.D., Lansing, is the author of an article entitled "Meet the Surgeon," published in the Fall, 1956, issue of *Blue Print for Health,* the national Blue Cross health digest. Similar articles by Dr. Johnson about the radiologist, anesthesiologist, and pathologist will follow in subsequent issues.

Jack Lapides, M.D. and **John M. Bobbitt, M.D.,** Ann Arbor, are the authors of an article entitled "Diagnostic Value of Bulbocavernous Reflex," published in the *Journal of the American Medical Association,* November 3, 1956.

Edmund L. Cooper, M.D., Detroit, is the author of an article entitled "Accommodation and Convergence," which was read at the Eastern Regional Meeting of the American Association of Orthoptic Technicians, April, 1955, in Philadelphia, and published in *The American Orthoptic Journal,* Volume 6, 1956.

Elsie H. Laughlin, O.T., Iowa City, Iowa, **Mary Louise Cronin, O.T.,** Rochester, Minnesota, and **Lorraine Lucas, O.T.,** Detroit, are the authors of an article entitled "A Panel Discussion On Small Angle Esotropia," published in *The American Orthoptic Journal,* Volume 6, 1956. This paper was read at the Midwestern Regional Meeting of the American Association of Orthoptic Technicians, May, 1956, in Milwaukee.

* * *

The Michigan Health Council has announced the Tenth Rural Health Conference to be held at the Kellogg Center of Michigan State University at East Lansing. The program will extend over three days, January 16, 17, and 18, 1957. Wednesday will be Professional Day, Thursday, Rural Health Day, and Friday, Community Health Day. For discussion will be fluoridation, sanitation, school health, water supply, "No Doctor in Town," traffic safety, farm accidents, and zoning ordinances.

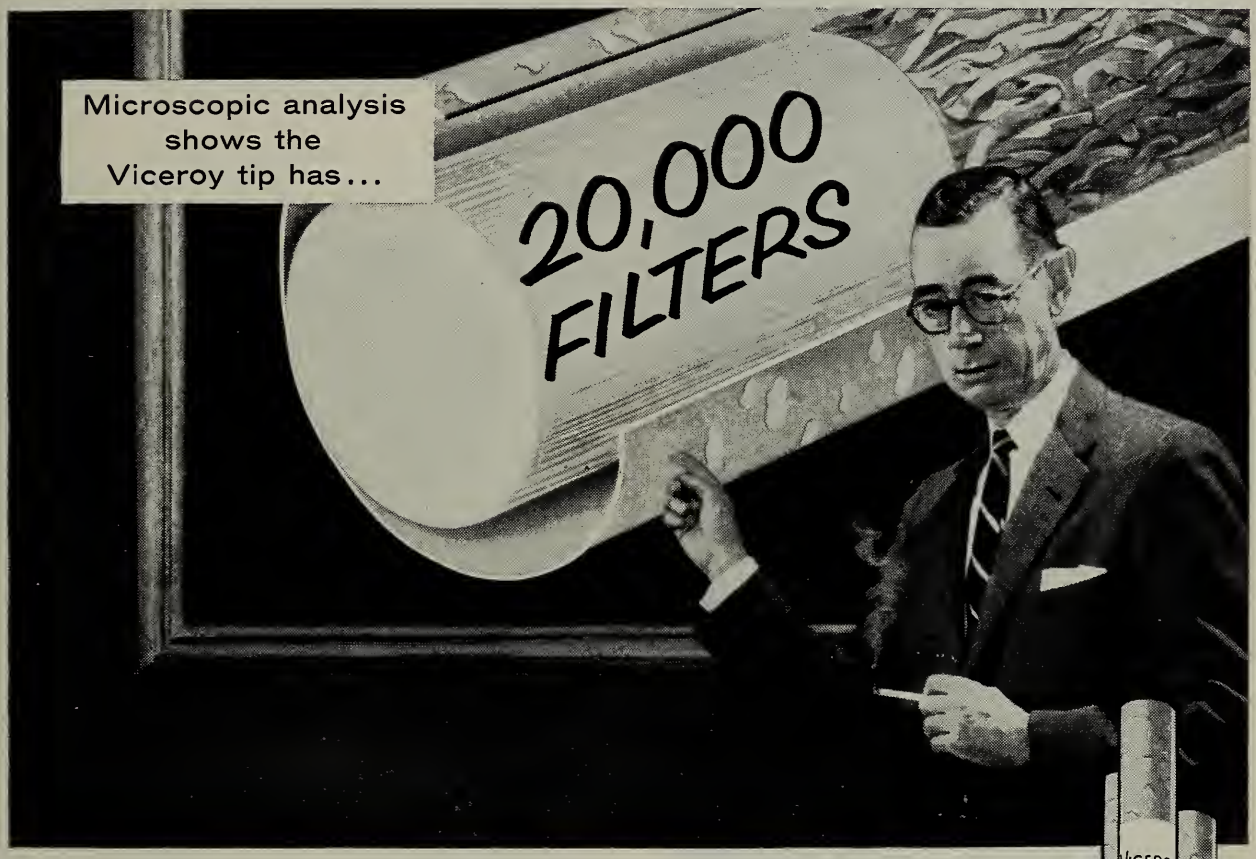
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Blue Cross and Blue Shield payments continue to set records never before reached. During the first eight months of this year, Michigan Hospital Service paid

(Continued on Page 1548)

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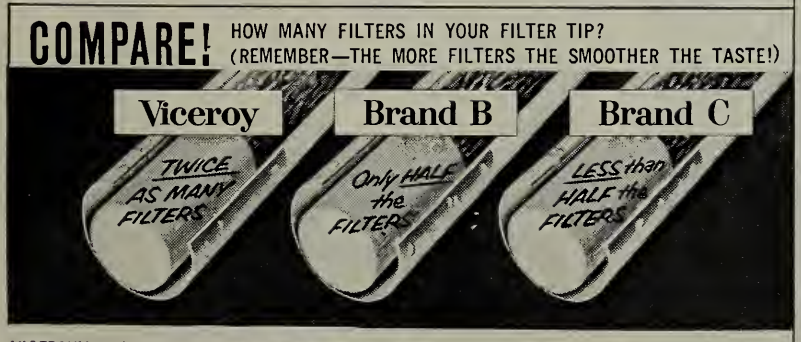


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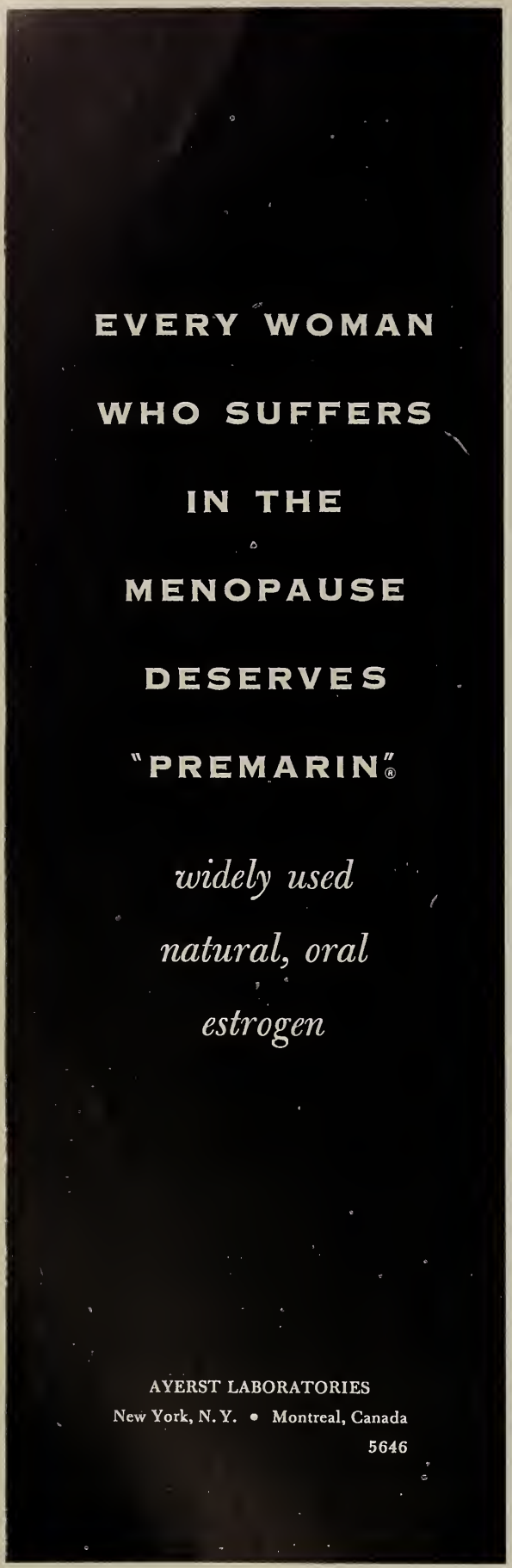
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(Continued from Page 1546)

to hospitals for services to its subscribers $66,534,939, an increase of 15.6 per cent over last year. This represents 92.82 per cent of earned income. The cost of operation was 3.785 per cent. During the same period, Michigan Medical Service paid $27,409,063, an increase over last year of 32 per cent. The reason for the M.M.S. increase is that the auto industry has increased x-ray and E.K.G. benefits, plus having mostly the $5,000 contract instead of the $2,500 one. Payments amount to 95 per cent of income, with operation costs 7.71 per cent. If these costs do not level off during the last four months, as they have in the past, some difficult problems will develop.

* * *

Medical Costs Up.—The monthly Consumers Index of the Department of Labor reports medical costs up for the current period. The index for medical care, which includes drugs and hospitalization as well as professional services and other essentials, rose from 133.3 to 134.3. The figures for food, housing, clothing, and other essentials was 117.1, as compared to 116.8 for the preceding month. The Bureau attributes the rise in the index to increased costs of hospital insurance and hospital costs. St. Louis, Missouri, had the highest cost average, 143.6, Detroit followed with 143.3, and Baltimore came next with 143. The index for Philadelphia was 138.1, Cincinnati 137.5, Chicago 136.8, San Francisco 135.5, Atlanta 128.2, New York 127.9, and Los Angeles 127.7.

* * *

AEC Research Awards.—Award of fifty unclassified life science research contracts in the fields of medicine, biology, biophysics and radiation instrumentation was announced by the U. S. Atomic Energy Commission. The contracts were awarded to universities and private institutions as part of the A.E.C.'s continuing policy of assisting and fostering research and development in fields related to atomic energy.

Ten of the awards, each of which covers a period of one year, are new projects; three are in the field of medicine, six in biology, one in radiation instrumentation. Forty contract renewals for one year were awarded to allow for continuation of research already in progress. Nineteen of these are in the medical sciences, sixteen in biology, three in biophysics and two in radiation instrumentation.

Contracts awarded in Michigan are as follows: (1) **University of Michigan:** Henry J. Gomberg, Studies with an X-Ray, Monochromator and X-Ray, Irradiation Service Operation, $20,000; (2) **Wayne University:** James E. Lofstrom, Studies on the Effects of Maternally Administered Phosphorus-32 on Fetal and Post-Natal Development of the Rat, $10,002; and (3) **University of Michigan:** R. E. Potter, The Biological Effects of Radiation, $50,000.

* * *

The survey conducted by the Michigan State Medical Society on State Medical Society dues is cited in the

(Continued on Page 1550)

Annual Clinical Conference

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(Continued from Page 1548)

Connecticut State Medical Journal for October, on the "Secretary's Office" page. Also listed is the report of amount of dues and special assessments.

* * *

The Kellogg Foundation has established a fund of $100,000 to set up a program to screen foreign medical school graduates seeking internship appointments in the United States. The Co-operating Committee on graduates of foreign medical schools will receive applications and evaluate credentials, and at present plan to conduct screening examinations in English in the applicant's home country through the foreign offices of the Educational Testing Service, Inc. It is hoped to start early in 1957.

* * *

The Seventh Annual County Medical Societies Civil Defense Conference, sponsored by the Council on Civil Defense of the American Medical Association, was held in Chicago, November 10 and 11, 1956. Among the participants were the following from Michigan: **Charles P. Anderson, M.D.,** Detroit; **Jacques Cousin, M.D.,** Dearborn; **Max L. Lichter, M.D.,** Detroit; **Max M. Van Sandt, M.D.,** Battle Creek; and **John M. Whitney, M.D.,** Battle Creek.

* * *



Of all the active cases of tuberculosis reported in 1955, symptoms led to the discovery of 25 per cent. This percentage may be higher since reports on more than 1,000 of the 3,416 total of active cases gave no information on what led to the discovery. Usually when tuberculosis is discovered through symptoms, the disease is in the advanced stages and has been passed to others by the infected person. A chest x-ray should be a part of every routine physical examination.

MICHIGAN TUBERCULOSIS ASSOCIATION

* * *

Members of the Kansas City Society of Anesthesiologists, the Missouri Society of Anesthesiology, and the Kansas Society of Anesthesiology were hosts for the annual meeting of the American Society of Anesthesiologists, held in Kansas City, October 10 to 12. Michigan men presenting papers were **Louis W. Lewis, M.D.,** Ann Arbor, whose topic was "Chemical Rhizotomy In Management of Intractable Pain," and **Ferdinard E. Greifenstein, M.D.,** Detroit, who participated in a panel discussion, his topic being "Anesthesia for Intracardiac Surgery."

* * *

The Mississippi Valley Medical Society held its Twenty-first Annual Meeting at the Hotel Morrison in Chicago, September 26, 27, and 28. Speakers for the scientific program included the following men from Michigan: **H. Marvin Pollard, M.S., M.D., F.A.C.P.,** Ann Arbor, whose topic was "Lower Abdominal Pain:" **Charles G. Johnston, M.D., M.S., F.A.C.S.,** Detroit, whose subject was "Intestinal Obstruction;" and **Dwight C. Ensign, M.D., F.A.C.P.,** Detroit, who participated

Say you saw it in the Journal of the Michigan State Medical Society

in a panel on "Arthritis and Rheumatic Disease (Medical Treatment and Investigation)."

* * *

William B. Hubbard, M.D. and **William C. Hubbard, M.D.**, Flint, presented a paper entitled "Three New Eye Instruments," at the recent meeting of the Academy of Ophthalmology and Otolaryngology in Chicago.

* * *

The International Academy of Proctology announces its annual cash prize and Certificate of Merit Award Contest for 1956-1957. The best unpublished contribution on proctology or allied subjects will be awarded $100.00 and a Certificate of Merit. Certificates will be awarded also to physicians whose entries are deemed of unusual merit. This competition is open to all physicians in all countries, whether or not affiliated with the International Academy of Proctology. The winning contribution will be selected by a board of impartial judges, and all decisions are final.

The formal award of the first prize, and presentation of other certificates, will be made at the annual convention dinner dance of the International Academy of Proctology, May 2, 1957, at The Plaza, New York, New York.

The International Academy of Proctology reserves the exclusive right to publish all contributions in its official publication, *The American Journal of Proctology*. All entries are limited to 5,000 words, must be typewritten in English, and submitted in five copies. All entries must be received no later than February 1. 1957, and should be addressed to the International Academy of Proctology, 147-41 Sanford Avenue. Flushing, New York.

* * *

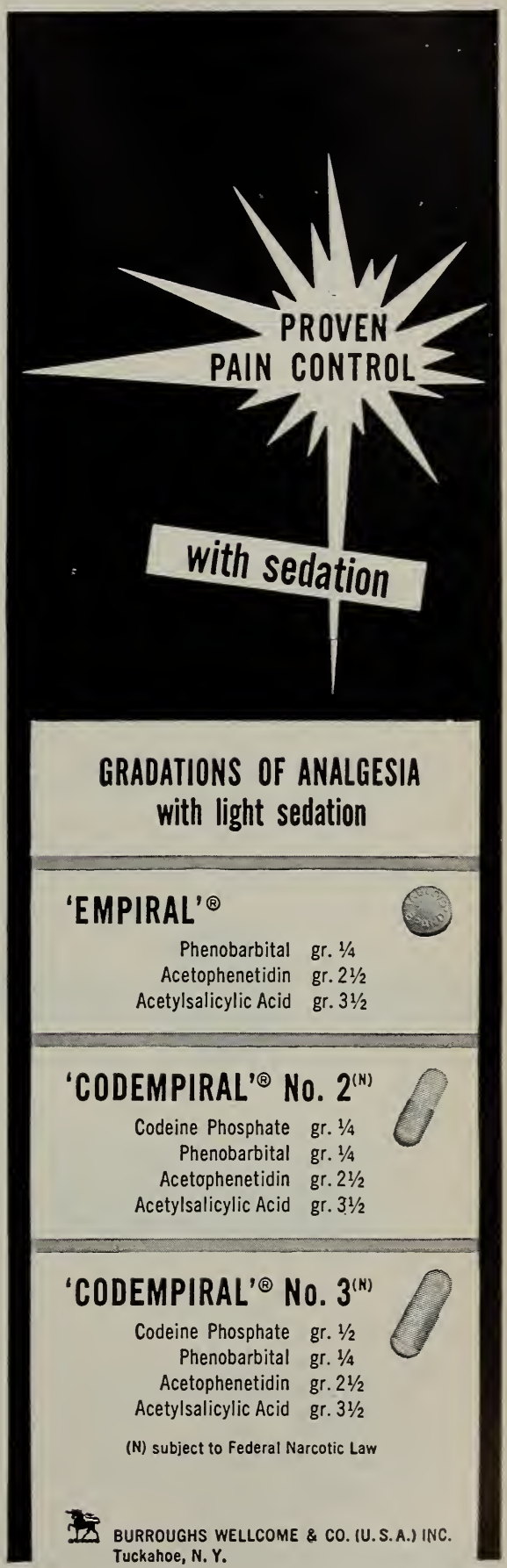
New Schering Award Contest.—Three increasingly important branches of medicine—cardiology, mental disease, and the treatment of eye disorders—have been selected as topics for the 1957 Schering Award Contest, according to Award Committee Chairman, Dr. Chester B. Szmal. Dr. Szmal has announced that the new contest is now under way.

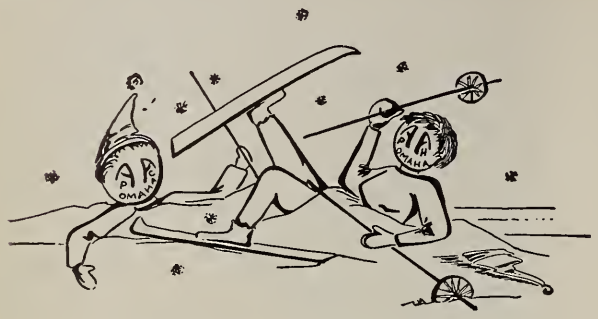
The competition, which is open annually to all medical students in the United States and Canada, invites them to submit papers on three topics of current medical significance. The three subjects for 1957 are: (1) Incidence of Various Types of Cardiovascular Diseases by Age Group in the Male and the Female; (2) Recent Trends in Corticosteroid Therapy for Ocular Disorders; and (3) Recent Advances in the Biochemical Aspects and Treatment of Mental Disease.

Literature and entry forms are being distributed in medical schools. Students interested in participating should submit their entry forms by January 1, 1957.

* * *

Virus Disease Simulating Poliomyelitis.—Many cases reported as nonparalytic poliomyelitis may not be polio at all, says a University of Michigan pediatrician. James L. Wilson, M.D., reports that "For years it has been known that a disease caused by the coxsackie virus has all of the symptoms and diagnostic indications of polio, except paralysis."





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Chairman of the University department of pediatrics and communicable diseases, Dr. Wilson notes that two cases reported recently as nonparalytic polio at University Hospital were not polio at all, but the coxsackie virus disease. "Extensive laboratory facilities and much time are needed by a hospital to distinguish between these two diseases," Dr. Wilson emphasizes.

Many published reports of new cases of nonparalytic polio indicate that the individual had received one or two shots of the Salk vaccine. "This does not imply in any way that the vaccine shots were at fault in not protecting the person from polio," Dr. Wilson asserts. He adds:

"It should be remembered the 1954 vaccine evaluation report did not credit the vaccine with preventing polio altogether. The report stated that the study indicated that the vaccine's effectiveness lay in its ability to reduce by a very high percentage the incidence of paralytic polio.

"Recent reports of the U. S. Public Health Service continue to substantiate this. They indicate that there has not been one death from paralytic polio during 1956 reported in a person inoculated with three Salk polio shots in the prescribed manner. In both Michigan's 1956 paralytic polio report, and that of Chicago's epidemic, not one case of paralytic polio had occurred among those receiving the three shots."

He suggests that people who have had one or two shots of the vaccine, and later develop nonparalytic polio, very likely have been saved from paralysis by antibodies derived from the vaccine. "Even in cases where mild paralysis occurs in a patient who has had one or two shots, it is probable that the limited amount of vaccine received prevented advanced paralysis."

* * *

Neurologic and Psychiatric Lectures.—Michigan's year-old Lafayette Clinic, training and research headquarters of mental illness, and Wayne State University's College of Medicine are offering postgraduate programs in psychiatry and neurology this fall. Leading psychiatrists from all over the United States will lecture at the psychiatry meetings held on the first and third Fridays of each month from 2 to 5 p.m. Both programs conclude June 21 and 22, 1957.

Both neurology and psychiatry sessions are open to physicians with no fee for the courses. The neurology sessions, scheduled for Saturday mornings from 9 to 12 noon, will review basic and clinical neurology. Psychiatry programs are divided into two sessions. The first part is a case conference with guest participants, followed by the visiting lecturer discussing his specialization.

* * *

The Department of Commerce has licensed the export of 7 million cubic centimeters of poliomyelitis vaccine for the fourth quarter of 1956. During the third quarter the amount was 1.4 million.

* * *

New "highs" have been registered for factory, nonfarm, and total employment. Personal income is up about 7 per cent compared with a year ago. Average factory pay in September was $2.00 per hour. Nonfarm employment was over 52,000,000, and total employment over 66,000,000.

Health Benefits after Age Sixty-Five.—A comprehensive report published Oct. 19, by the U. S. Department of Labor on coverage of older workers under collectively bargained health and insurance plans states that very few of them are discriminatory; in fact, that of 300 plans analyzed—covering some 5 million workers—only three discontinued one or more benefits at age sixty-five or older.

* * *

American Board of Obstetrics and Gynecology.—The next scheduled examinations (Part I), written, for all candidates will be held in various cities of the United States, Canada, and military centers outside the continental United States, on Friday, February 1, 1957, at 2:00 p.m. Candidates must submit case reports to the office of the Secretary within thirty days of being notified of their eligibility to Part I. The cases must be prepared in the manner described in the Bulletin of the Board with a duplicate index list.

Requests for re-examination in Part II must be received prior to February 1, 1957.

Current bulletins outlining present requirements may be obtained by writing to: Robert L. Faulkner, M.D., Secretary, American Board of Obstetrics and Gynecology, 2105 Adelbert Road, Cleveland 6, Ohio.

* * *

The Sixth Annual Symposium on Blood will be held at Wayne State University, Detroit, on January 18 and 19, 1957. Beginning at 9 a.m., papers will be presented all day Friday in the auditorium of the College of Medicine, 645 Mullett Street. Facilities for a group dinner and social gathering are being reserved for Friday evening at a Detroit restaurant famous for fine food. The scientific program will be concluded Saturday noon. Ample time is being allowed for the audience to discuss the contributions of the invited speakers. Walter H. Seegers, Ph.D., Sc.D., is chairman.

* * *

Hospital Benefits.—The American Medical Association has announced a study to determine what the hospital patient gets for his money. It will be the second phase of a five-year study measuring the medical service given the American people by their physicians. The total cost will be about $100,000 and is intended to measure services and not money spent. The results to be published in 1958 may bring about changes in hospital construction, medical education, health insurance rates or scope and other health matters. As a first step, questionnaires have been mailed to 7,000 hospitals to learn the age, sex, length of stay and diagnosis for every hospitalized person discharged during the third week of October, 1956.

It is hoped to determine what ailments or conditions are sending most Americans to the hospial, which are keeping them there longest, and how many beds are taken up by accidents, pregnant women, and non-emergency surgery.

* * *

Michigan Department of Social Welfare.—The *Grand Rapids Press* of October 17, 1956, reports the appointment by Governor Williams of Miss Clara Sweiczkows-

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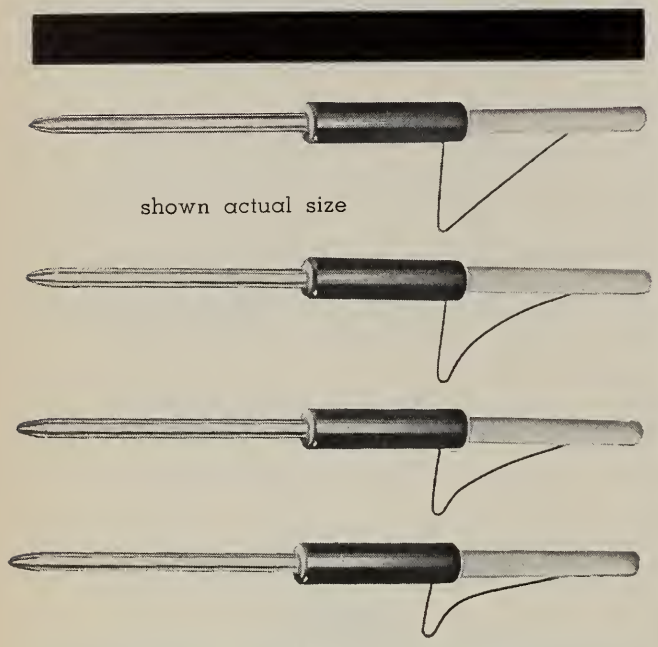
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**Described in his paper which will be sent on request*

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ka of Detroit, to the Board of the Michigan Department of Social Welfare to replace **L. G. Christian, M.D.**, of Lansing, who has served the Board for seventeen years.

* * *

The Frank H. Lahey Memorial Award for distinguished service to medical education by a layman was awarded this year to Colby M. Chester, honorary chairman of the General Foods Corporation. The presentation was made by former President Herbert Hoover at a dinner in Mr. Chester's honor at the Waldorf in New York. Among the speakers who paid tribute to Mr. Chester were Dr. Ward Darley, president of the University of Colorado, who in January will become executive director of the Association of American Medical Colleges.

This is particularly interesting to Michigan, the home of General Foods.

* * *

A radiologist's interpretative knowledge of the shadows on an x-ray film has dramatically led to the return of an infant to its rightful parents after they innocently had taken home the wrong baby from the hospital.

That is the story told in the September, 1956, issue of *Radiology* by a Hagerstown, Maryland, radiologist, Dr. Stanley H. Macht. In relating the experience, with its happy ending, Dr. Macht pointed out in his article that there are occasional reports these days of "mix-ups" among newborn infants in busy hospital nurseries.

* * *

James L. Wilson, M.D., chairman of the University of Michigan's Department of Pediatrics and Communicable Diseases, told a meeting of the Omaha-Midwest Clinical Society that newborn infants might soon be getting "quadruple" shots, including the Salk vaccine, to protect them against major diseases. Three-month-old youngsters are now getting two shots—polio vaccine and a triple vaccine for protection against diphtheria, tetanus and whooping cough—at the University of Michigan Medical Center Well Baby Clinic.

"This is just the first step," Dr. Wilson said. "At the present time, we are using two syringes and two needles. We hope to demonstrate soon that both polio vaccine and triple vaccine can be effectively put together and injected into the child, using only one syringe. We have every reason to believe that this will be successful."

* * *

Lectures on History of Surgery.—The International College of Surgeons through its School of the History of Surgery and Related Subjects has inaugurated a series of lectures on the history of surgery. They will be presented in the Surgeons Hall of Fame, 1524 Lake Shore Drive, Chicago, and are open to physicians and medical students, according to Dr. Max Thorek, international secretary-general.

Dr. Leo M. Zimmerman, secretary-treasurer of the Society of Medical History of Chicago and professor and chairman of the department of surgery, Chicago Medical School, gave the first lecture on October 23. Dr. Zimmerman's subject was "Beginning of Surgery and Edwin Smith Papyrus."

(Continued on Page 1556)

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We believe that Brighton Hospital offers the answer. Physicians can now send their alcoholic patients to Brighton with the certain assurance that they will find expert medical and nursing attention AND that, if they so desire, patients will be thoroughly indoctrinated with the program of Alcoholics Anonymous.

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DOCTORS, we are here to serve you. We are here to serve your patients.

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*Fishberg, A. M.: Hypertension and Nephritis, ed. 5, Philadelphia, Lea & Febiger, 1954, pp. 177-178.

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(Continued from Page 1554)

Other lectures in the series will be:

January 8—"Early French Surgery," Dr. Guy Kasten Tallmadge, professor of the History of Medicine, Marquette University School of Medicine, Milwaukee.

January 29—"Surgeons and the Rise of Anatomy," Dr. Ilza Veith, professor of the history of medicine, University of Chicago, and president of the Chicago Society of Medical History.

February 19—"Antisepsis and Asepsis," Dr. Eugene M. K. Geiling, Frank B. Hixson Distinguished Service professor and chairman of the department of pharmacology, University of Chicago.

March 1—"The Development of Surgical Anesthesia" Dr. Max Sadove, professor of anesthesiology, University of Illinois.

April 2—"British Anatomists and Surgeons," Dr. Lloyd G. Stevenson, professor of the history of medicine, McGill University, Montreal.

April 23—"Barber Surgeons and the Liberation of Surgery," Dr. Morris Fishbein, professor of medicine (Rush) University of Illinois College of Medicine, Chicago.

May 14—"The Rise of Modern Surgery," Dr. Chauncey Leake, College of Medicine, Ohio State University, Columbus.

* * *

New Brochure on Medical Internships.—Major-General Silas B. Hays, the Surgeon General of the Army, addressing recently graduated doctors of medicine announce a new brochure on the Army Medical Intern Program.

Young doctors concerned with a decision as to where they will intern will find a well-rounded résumé of fundamental information in the illustrated pamphlet entitled, "An Army Internship of Superior Training." The booklet carries a map of the United States showing the location of the Army's seven teaching hospitals on the continent, the eighth, Tripler Army Hospital, is in Hawaii.

Copies of the new brochure may be obtained from the following distribution points: Army Medical Service Procurement Officer, Medical Section, Headquarters, First Army, Governors Island, New York; Army Medical Service Procurement Officers, Medical Section Headquarters, Second Army, Fort George G. Meade, Maryland; Army Medical Service Procurement Officer, AG Section Headquarters, Third Army, Fort McPherson, Georgia; Army Medical Service Procurement Officer, Medical Section, Headquarters, Fourth Army, Fort Sam Houston, Texas; Army Medical Service Procurement Officer, Military Personnel Procurement Division, Headquarters, Fifth Army, 1660 East Hyde Park Blvd., Chicago, Illinois; and Army Medical Service Procurement Officer, Medical Section, Headquarters, Sixth Army, the Presidio of San Francisco, California.

* * *

Laurence F. Segar, M.D., Detroit, has been appointed Governor for the State of Michigan of the American Diabetes Association for the year 1956-57.

* * *

William A. Hyland, M.D., Chairman of the AMA Delegates from Michigan, was appointed Chairman

The Officers and Publication Committee of the
Michigan State Medical Society extend their



Best Wishes
for a
Merry Christmas
and a
Happy and Prosperous New Year
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of the Michigan State Medical Society



of the Reference Committee on Medical Education and Hospitals at the Seattle AMA Annual Session.

* * *

The Wayne County Medical Society broke ground for its new building, December 1, 1956. The new building will be erected next to the Medical Library of Wayne State University College of Medicine, Detroit.

* * *

D. Bruce Wiley, M.D., of Utica, Chairman of The Council of the Michigan State Medical Society, was guest speaker at the meeting of the Southeastern District of the Woman's Auxiliary (seven counties) in Mt. Clemens, November 5. His subject was: "Problems Facing the Michigan State Medical Society."

* * *

"The Doctor in the Law—Fundamentals" is an interesting and informative booklet published by the Law Department of the Medical Protective Company, Fort Wayne, Indiana. "Fundamentals" is the first in a series of such booklets. Selected legal doctrines will be discussed in succeeding issues.

* * *

The Barry County Medical Society recently contributed $5,000 to the Michigan Foundation for Medical and Health Education to be earmarked for the purpose of loans to medical students, residents of Barry County, under the terms of the Student Aid Revolving Fund Plan administered by the Foundation.

This oustanding generosity will aid in a very material sense young medical students or residents of Barry County who are being educated at either Wayne State University College of Medicine or the University of Michigan Medical School.

Congratulations, Barry County, on this enlightened action!

* * *

Frank E. Luton, M.D., formerly of St. Johns, Michigan, has been appointed physician of Beaver Island effective November 1. Dr. Luton will replace Harry F. Vail, M.D., who returned to the mainland September 1, to resume private practice. Dr. Vail had practiced on the Island since 1952.

Dr. Luton has practiced in St. Johns for the last thirty-nine years. He was former Chief of Staff of Clinton Memorial Hospital in St. Johns and is an Emeritus Member of the Michigan State Medical Society.

* * *

The American Association of Medical Assistants held its first National Convention in Milwaukee, Wisconsin at the Pfister Hotel, October 26, 27 and 28; Alice Budny of Milwaukee was General Chairman.

Hallie Cummins of Caro, Michigan, immediate Past President of the Michigan State Medical Assistants Society, was selected by a Michigan-Indiana caucus as delegate to the National Board of Directors. She was elected by the Board of Directors as chairman of the three-member Executive Committee.

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and By-Laws, and elected officers for this, the first year of the American Association of Medical Assistants. The officers: President—Maxine Williams, Kansas; Treasurer—Carmen Kline, Kansas; Vice President—Marion Little, Iowa; President-Elect—Mary Kinn, California; Recording Secretary—Alice Budny, Wisconsin.

Representatives of the AMA and Medical Society Advisory Board members were there to assist in the initial planning of the organization. Ralph W. Shook, M.D., Kalamazoo, Vice Chairman of the Advisory Committee to the MSMAS, attended in an advisory capacity. J. E. Manning, M.D., Saginaw, was the Saturday evening banquet speaker; his subject, "The Ideal Medical Assistant." Accompanying Miss Cummins in the nineteen-member Michigan delegation were: Lorine Nuechterlein, Saginaw, official representative of the MSMAS; Doris Jarrad, Lansing, President of MSMAS, Mrs. Lila Angel, Mrs. Charlotte Ash, and Mrs. Harriet Rolph, Kalamazoo; Josephine Anthony, Mrs. Marianne Baughman, Mary Daigle and Donna Hislop, Muskegon; Miss Janice Lupien of Muskegon Heights; Mrs. Vivian Branyan of Grand Haven; Miss Gloria Conklin and Mrs. Marie Erickson of Saginaw, Mrs. Violet Howorth and Mrs. Margaret McKay of Benton Harbor and Miss Helen Rehm of Ferndale; Mrs. Eileen DeWent of Holland and Mr. Kenneth Cook of Saulte Ste. Marie, Michigan.

Officers elected for the coming year are: President—Doris Jarrad, Lansing; President-Elect—Marlouise Redman, Detroit; Recording Secretary—Arlene Bublitz, Bay City; Corresponding Secretary—Dorothy Little, Lansing; Treasurer—Alberta Warmbold, Paw Paw.

WHAT THEY SAID ABOUT THE 1956 MSMS ANNUAL SESSION

Somers H. Sturgis, M.D., Boston (guest essayist): "It was indeed a rewarding experience for all of us who attended."

Lester S. Reavley, M.D., Sterling, Illinois (President Elect of Illinois State Medical Society): "Mrs. Reavley and I shall always have many pleasant memories of our trip to the Michigan meeting of 1956."

L. O. Simenstad, M.D., Osceola, Wisconsin (President of the State Medical Society of Wisconsin): "I have never enjoyed a meeting more. I thought you were all most considerate."

Otis Anderson, M.D., Washington, D. C. (guest essayist): "I wish to express my appreciation for the generous hospitality I enjoyed during my attendance at the MSMS annual meeting."

M.D. LOCATIONS

Through November 1, 1956

Placed by Michigan Health Council
Richard G. Hopkins, M.D.....Elk Rapids (Nov. 1)

Assisted by Michigan Health Council
Robert C. Hafford, M.D. Bay City
Alexandre Lusis, M.D. Mount Pleasant
Robert O. Dubpernell, M.D. Detroit
William L. Farmer, M.D.....Detroit
A. S. Lightfoot, M.D. Flint

Mount Carmel Mercy Hospital's Annual Clinic Day will be held Wednesday, January 30, 1957. The program has been set up as follows:

Morning Session—9:00 a.m.

I. C. Rubin, M.D.,
Emeritus Professor of Clinical Gynecology,
New York University, New York.
"The Role of Fibroids in Infertility With Special Reference to Myomectomy"

Walter C. Alvarez, M.D.,
Emeritus Professor of Medicine, Mayo Clinic,
Rochester, Minnesota.
"The Neuroses and The Minor Psychoses"

Burrill B. Crohn, M.D.,
Distinguished Gastroenterological Consultant,
Columbia University, New York, New York.
"Diagnosis and Treatment of Regional Ileitis"

Charles F. Geschickter, M.D.,
Professor of Pathology, Georgetown University,
Washington, D. C.
"Benign and Malignant Lesions of the Breast"

Luncheon—12:30 p.m.

Compliments of the Sisters of Mercy.

Afternoon Session—1:45 p.m.

Leo G. Rigler, M.D.,
Professor and Chief of Department of Radiology,
University of Minnesota, Minneapolis, Minnesota.
"The Detection of Disease in Its Incipiency"

Angus D. McLachlin, M.D.,
Professor of Surgery and Chairman, Department of Surgery,
University of Western Ontario, London, Canada.
"The Surgical Management of the Diabetic Foot"

Richard H. Overholt, M.D.,
Clinical Professor of Surgery,
Tufts University, Boston, Massachusetts.
"The Direct Approach to Shadow and Substance"

* * *

The Department of Postgraduate Medicine, University of Michigan Medical School, announces brief review courses for practicing physicians in 1957 as follows:

Anatomy(Thursdays) February 7-May 23
Basic Sciences October 1-June 1
Clinical Exercises for Practitioners
.....(Wednesdays) October 10-May 15
Internal Medicine
Clinical Internal Medicine
.....(Thursdays) October 4-April 18
Diseases of the Heart March 18-22
Electrocardiographic Diagnosis March 25-30
Metabolism and Endocrinology April 1-5
Diseases of the Blood and Blood-Forming Organs April 8-12
Diseases of Gastrointestinal Tract.....April 15-19
Rheumatology April 22, 23 and 24
Pulmonary Diseases April 25, 26 and 27
Recent Advances in Therapeutics.....April 29-May 3
Ophthalmology April 22, 23 and 24
Otolaryngology April 18, 19 and 20
Pediatrics—Obstetrics and Gynecology January 28-February 1
Radiology, Diagnostic April 8-12
Radio-active Isotopes, Clinical use of.....As arranged

Further information and application blanks may be obtained from: John M. Sheldon, M.D., Director, Department of Postgraduate Medicine, 1610 University Hospital, Ann Arbor, Michigan.

In Lansing

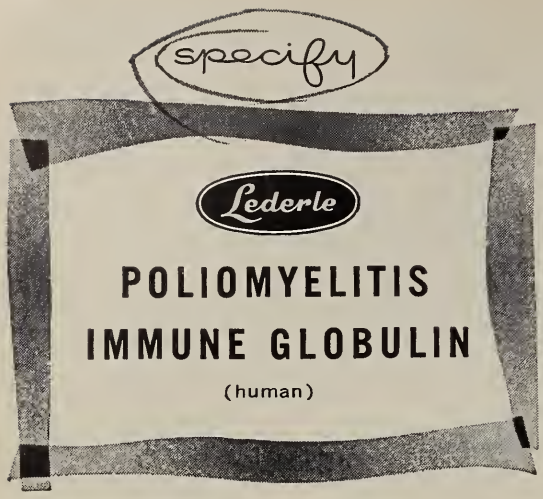
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MEDICAL TELEVISION SHOWS
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Date	*Station*	*Subject*	*Guests*
Oct. 7, 1956	WJBK-TV, Detroit	"Tuberculosis"	Miss Minetta Nicolai, Lansing Oscar D. Stryker, M.D., Mt. Clemens
Oct. 11, 1956	*WKAR-TV, East Lansing*	"Sanitation"	Robert Forbes, Detroit
Oct. 14, 1956	WJBK-TV, Detroit	"Safe Plumbing—Good Health"	Philip Shirley, Lansing Robert Lyons, Lansing Gray Turney, Lansing
Oct. 21, 1956	WJBK-TV, Detroit	"Wayne County Area Regional Health Conference"	A. Jerome Geisler, Dearborn Wilbur White, Detroit Edwin Walker, River Rouge Francis M. Schmitt, DDS, Garden City James Charters, Dearborn
Oct. 25, 1956	*WKAR-TV, East Lansing*	"Foot Health and the Chiropodist"	J. E. Snyder, DSC, East Lansing William E. Sackett, DSC, Lansing
Oct. 28, 1956	WJBK-TV, Detroit	"Alcoholism in Michigan"	Miss Ruth Segall, Ypsilanti Roland Athay, M.D., Detroit George Nimmo, Lansing



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THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column, and this will be deemed by us as full compensation to those sending them. A selection will be made for review, as expedient.

SURGERY OF THE HAND. By Sterling Bunnell, M.D., Honorary Member, American Academy of Orthopedic Surgeons, American Orthopaedic Association, Western Orthopedic Association, California Society of Plastic Surgeons, and Sociodad Latino-Americana de Ortopedia y Traumatologia; Corresponding Member, British Orthopaedic Association; Foreign Corresponding Member, Societas Ortopedica Scandinavica; Member, American Surgical Association, American Association of Plastic Surgeons, American Society of Plastic and Reconstructive Surgery, American Association for the Surgery of Trauma, and American Society for Surgery of the Hand; Emeritus Member, Hand Club of Great Britain; Fellow, American Occupational Therapy Association (1951-1953); Consultant to the Surgeon General of U. S. Army, to the U. S. Navy, and to the Alaska Department of Health; U. S. Medal for Merit; Ordre National de la Le'gion d'Honneur; Ordem Nacional do Cruzeiro do Sul; Licentiate, American Boards of General, Plastic and Orthopaedic Surgery. Third Edition, 1047 illustrations and nine color plates. Philadelphia and Montreal: J. B. Lippincott Company. Price $22.50.

Doctor Bunnell and his associates have rewritten and enlarged the new third edition of this outstanding reference on acute and chronic injuries of the hand, adding 200 new photographs and illustrations. The changes and new features will be of considerable help to the surgeon who is confronted by the new problems which result from the trauma of increasingly complex machinery and automation.

There are additions to the chapters on skin grafting and plastic surgery, the use of antibiotics, new splinting techniques and recent ideas on early exercise following surgery. Causalgia and painful amputation stumps are well discussed in the light of new procedures. The subject of nerve grafting has been amplified, as well as the immediate suture of severed nerves, large and small. There are new procedures on thumb reconstruction and the construction of new digits. The final chapter on tumors of the hand has been amplified in subject and new photographs added.

An important part of hospital, teaching and private medical libraries since 1944, his new third edition will continue to aid the surgeon produce a better result.

S.B.W.

ORGANIZED HOME MEDICAL CARE IN NEW YORK CITY. A Study of Nineteen Programs. By The Hospital Council of Greater New York. Published for the Commonwealth Fund by Harvard University Press, Cambridge, Massachusetts, 1956. Price $8.00.

The Hospital Council of Greater New York has conducted a study of nineteen medical home care programs in and about New York City. This has been going on for years and reports have been issued in Pamphlet form covering certain phases.

This book consolidates the work and makes a vast

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is quality you trust

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amount of material available. After outlining the scope, objectives and methods of study, a review of the history and background is made. An extensive and critical study of the patients and their families follows with chapters on home care, diagnosis, length of stay, types of service, attitudes of the patients and their families. This is followed by a comparison of the various types of program and experience.

The analysis covers the objectives, personnel, referral, acceptance and rejection of patients, administration of service, relationship to hospitals and evaluation. Ideal programs are suggested.

The appendices contain reports from Montefiore Hospital and fourteen municipal and tuberculosis hospitals dealing with chronic case care.

The book contains a wealth of information valuable in medical case studies.

EDUCATING SPASTIC CHILDREN. The Education and Guidance of the Cerebral Palsied. F. Eleanor Schonell, M.A., Ph.D., Formerly Research Fellow, University of Birmingham, Department of Pediatrics and Child Health. New York: Philosophical Library. Price $6.00.

This is a field which has been sadly neglected but for unusual efforts mostly in individual cases. The reviewer knows a severely spastic boy who secured a good education and became a successful lawyer. Opportunities had to be made, but they were available. This book is most encouraging and challenging and we bespeak wide use.

It reviews historical interest and stresses the recognition and estimation of intelligence as a first requisite, then building upon every opening and even making every opening.

Twenty-four per cent of these children are normal or supernormal in intelligence, as against 73 per cent of the normal population.

COMMUNITY PROGRAMS FOR MENTAL HEALTH. Theory—Practice—Evaluation. Editors: Ruth Kotinsky and Helen L. Witmer. Advisory Committee: Abraham Z. Barhash, M.D.; Jules V. Coleman, M.D.; Sibylle Escalona; Katherine E. Faville; George E. Gardner, M.D.; Paul V. Lemkau, M.D.; W. Carson Ryan; and Mildred C. Scoville. Contributors: Barbara Biber; H. E. Chamberlain; Sol W. Ginsburg; Robert R. Holt; Louisa P. Howe; Marie Jahoda; Elizabeth de Schweinitz; and Edith Miller Tufts. Published for the Commonwealth Fund by Harvard University Press, Cambridge, Massachusetts, 1955.

Since its beginning nearly fifty years ago, the mental hygiene movement has undergone many changes, and the field of mental health promotion has become so broad that some appraisal seemed necessary. This compendium endeavors to evaluate what is being done in the name of mental health on a community level. Among the problems discussed is the confusion that arises when a clearly expressed and well delimited definition of "mental health" is attempted. This becomes more difficult when it becomes apparent that the definition must meet the demands of the clinical psychiatrist

Say you saw it in the Journal of the Michigan State Medical Society

and the research scientist, as well as the worker at the community level. Among the criteria presented in definitions of mental health in this book are the following: (1) "the ability to hold a job, have a family, keep out of trouble with the law, and enjoy the usual opportunities for pleasure;" (2) "the absence of mental disease, normality of behavior, adjustment to environment, unity of personality, and correct perception of reality."

The first of these is admittedly "non-scientific" but still does provide a reasonable basis for evaluation. Though the second is somewhat more inclusive, it raises a number of obvious questions as well as the need for further definition. The original effort of the mental hygiene movement was directed at improvement of the services and treatment facilities for mentally and emotionally ill persons. It is a well known fact that this task is not complete. The related problem of education of the general public in regard to the unqualified acceptance of the discharged patient into his original environment also needs further attention. The separation of these objectives from actual "prevention" of mental illness presents further problems confronting the workers at all levels.

In this book all of these problems and questions are presented and discussed in papers under the following titles: "The Mental Health Movement: Its Theoretical Assumptions;" "The Field of Mental Health Promotion;" "Nine Programs for the Promotion of Mental Health;" "Schooling as an Influence in Developing Healthy Personality;" "Problems in the Evaluation of Mental Health Programs;" "Toward a Social Psychology of Mental Health;" and "Problems in the Use of Sample Surveys."

Though no miraculous or far-reaching solutions are presented, this book should be of value to those working in the field of mental health.

OBSERVATIONS ON KREBIOZEN IN THE MANAGEMENT OF CANCER. By A. C. Ivy, Ph.D., M.D., Professor of Physiology and Head of the Department of Clinical Science, University of Illinois, and formerly Executive Director of the National Advisory Cancer Council and Director-at-large of the American Cancer Society: John F. Pick, S.B., M.M., M.D., Head of Department of Plastic Surgery, Columbus Hospital, Chicago, and formerly Assistant Clinical Professor of Surgery, University of Illinois; and W. F. P. Phillips, M.D., Department of General Practice, St. Francis Hospital, Evanston, Illinois. Chicago: Henry Regnery Company, 1956. Price $2.50.

The appearance of this thin book undoubtedly comes as a surprise to those experienced oncologists and cancer workers who felt that, after the thorough study and evaluation of Krebiozen in many quarters, the matter had been corrected and promptly interred for all time.

While the book is heavily weighted with efforts to give the drug better than an even break, there is evidence of considerable candor and the once extravagent claims for cures have now been so modified that its palliative and oncolytic properties are stressed. In a somewhat clouded fashion there is an attempt to relate its action to the present day use of steroid and polysaccharide therapy in neoplastic diseases.

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The histopathologic descriptions of tumor types often lead one to question the degree of malignancy, or possibly even the existence of it. The medical reader also will sense a lay approach in the general assembly of the monograph, the manner in which the case reports are presented, and the stubborn chauvinism born of a lost cause. A.A.H.

CLINICAL CHEMISTRY. Principles and Procedures. By Joseph S. Annino, Clinical Chemist, Massachusetts Memorial Hospitals, Boston, Massachusetts. Boston and Toronto: Little, Brown and Company. Price $7.50.

This book is written in a simple lucid style and is ideal for the teaching of clinical chemistry to medical technologists. No words are wasted but the explanations appear adequate. Very little clinical data are included. A.A.H.

THE MENNINGER STORY. By Walker Winslow. Garden City, New York: Doubleday & Company, Inc., 1956. Price $5.00.

In the field of psychiatric medicine, the accomplishments of Dr. Charles F. Menninger and his two sons, Karl and William, must have a very considerable place. This book is, in effect, a biography of these three giants in medical history. It is most interesting reading, going into great detail about the training and many accomplishments of each. The family history is just as interestingly told. We enjoyed the book.

organomercurial diuretics "...permit ingestion of enough salt to make food palatable; without them, many patients would lose their appetites, a consequence of the salt-free diet which has occasionally been known to cause serious malnutrition."*

*Modell, W.: The Relief of Symptoms, Philadelphia, W. B. Saunders Company, 1955, pp. 265-266.

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Fractures and Traumatic Surgery, two weeks, March 11
Anesthesia, two or four weeks, by appointment

GYNECOLOGY & OBSTETRICS—Office and Operative Gynecology, two weeks, February 11
Vaginal Approach to Pelvic Surgery, one week, February 4
General and Surgical Obstetrics, two weeks, February 25

MEDICINE—Electrocardiography and Heart Disease, two-week basic course, March 11
Gastroenterology, two weeks, May 13
Dermatology, two weeks, May 6
Gastroscopy, two weeks, March 18

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PEDIATRICS. Edited by Donald Paterson, M.D., Formerly Clinical Professor, Department of Pediatrics, The University of British Columbia, and John Ferguson McCreary, M.D., Professor and Head, Department of Pediatrics, The University of British Columbia. With 36 Contributing Authors. Philadelphia. Montreal: J. B. Lippincott Company. Price $14.00.

This excellent text on pediatrics is written for the general practitioner. There are thirty-six contributing authors with very little reduplication of the text material. Emphasis is placed on diagnosis and treatment. The therapy is conservative and possibly behind the present U. S. standards.

The simplified explanation of the pathogenesis of the metabolic and blood diseases is very well done. This book would serve well as text for teaching pediatrics to general practitioners and nurses. The tables on diets, drug dosage and laboratory standards are all excellent.

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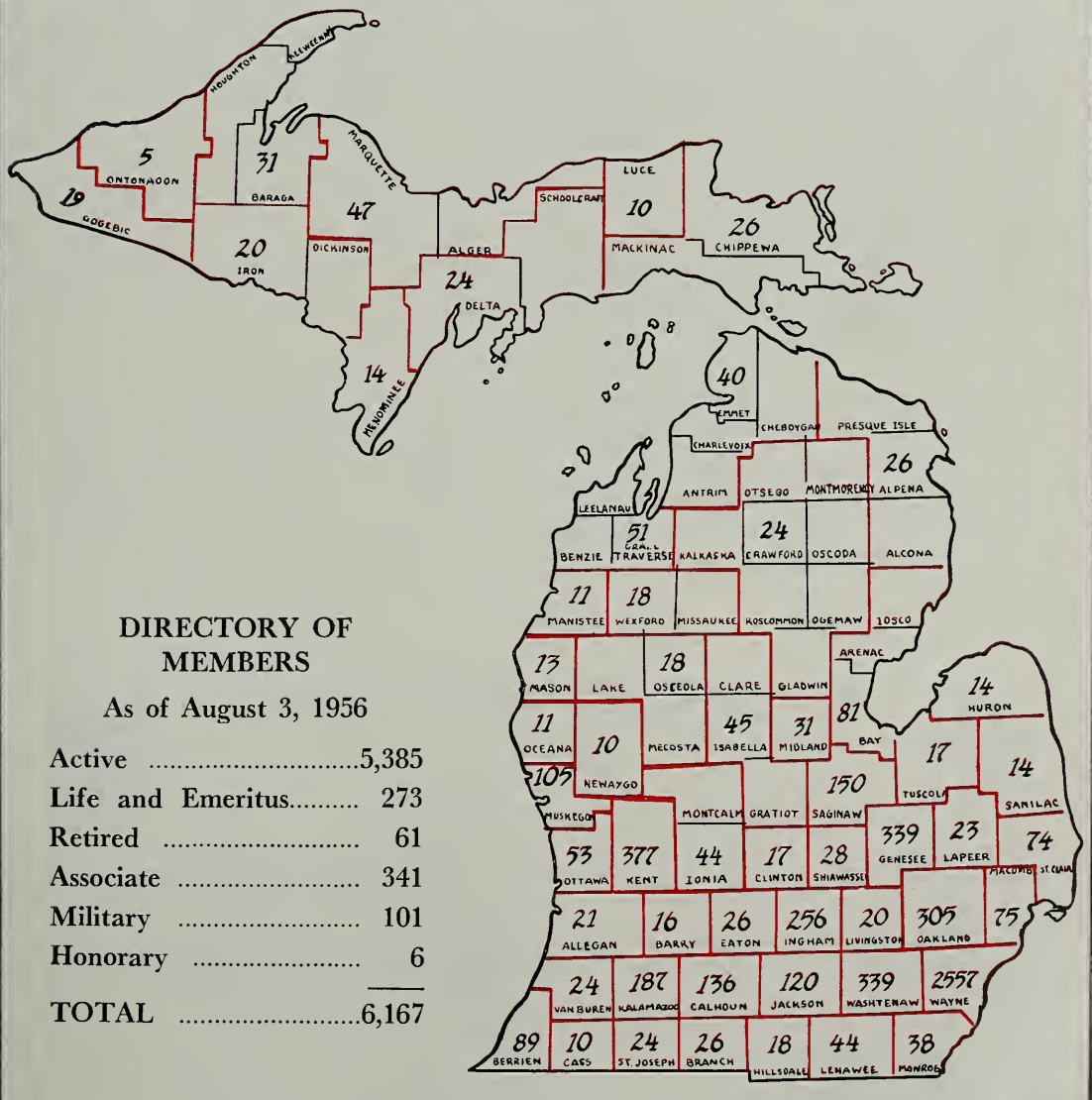
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The Journal

of the Michigan State Medical Society

Volume 55 | August, 1956 | Number 8

Directory of Members — 1956



DIRECTORY OF MEMBERS

As of August 3, 1956

Active	5,385
Life and Emeritus	273
Retired	61
Associate	341
Military	101
Honorary	6
TOTAL	6,167

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Cities of 1,000 Population or More With County Designation

CITY	COUNTY
Adrian	Lenawee
Albion	Calhoun
Algonac	St. Clair
Allegan	Allegan
Alma	Gratiot
Almont	Lapeer
Alpena	Alpena
Anchor Bay Gardens	Macomb
Ann Arbor	Washtenaw
Austin Lake	Kalamazoo
Bad Axe	Huron
Bangor	Van Buren
Battle Creek	Calhoun
Bay City	Bay
Belding	Ionia
Belleville	Wayne
Bellevue	Eaton
Benton Harbor	Berrien
Benton Heights	Berrien
Berkley	Oakland
Berrien Springs	Berrien
Bessemer	Gogebic
Big Rapids	Mecosta
Birmingham	Oakland
Blissfield	Lenawee
Bloomfield Hills	Oakland
Boyne City	Charlevoix
Brighton	Livingston
Bronson	Branch
Brookline	Jackson
Brownlee Park	Calhoun
Buchanan	Berrien
Bullock Creek	Midland
Cadillac	Wexford
Calumet	Houghton
Capac	St. Clair
Carleton	Monroe
Caro	Tuscola
Carrollton	Saginaw
Carson City	Montcalm
Caspian	Iron
Cass City	Tuscola
Cassopolis	Cass
Cedar Springs	Kent
Center Line	Macomb
Charlevoix	Charlevoix
Charlotte	Eaton
Cheboygan	Cheboygan
Chelsea	Washtenaw
Chesaning	Saginaw
Clare	Clare
Clawson	Oakland
Clinton	Lenawee
Clio	Genesee
Coldwater	Branch
Coloma	Berrien
Colon	St. Joseph
Columbus Grove	Monroe
Commerce	Oakland
Constantine	St. Joseph
Coopersville	Ottawa
Corunna	Shiawassee
Croswell	Sanilac
Davison	Genesee
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Decatur	Van Buren
Detroit	Wayne
Detroit Beach	Monroe
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Dowagiac	Cass
Dundee	Monroe
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Fenton	Genesee
Ferndale	Oakland
Ferrysburg	Ottawa
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Flint	Genesee
Flushing	Genesee
Fowlerville	Livingston
Frankenmuth	Saginaw
Frankfort	Benzie
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Gladwin	Gladwin
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Grand Ledge	Eaton
Grand Rapids	Kent
Grandville	Kent
Grayling	Crawford
Greenville	Montcalm
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Grosse Pointe Farms	Wayne
Grosse Pointe Park	Wayne
Grosse Pointe Shores	Wayne & Macomb
Grosse Pointe Woods	Wayne & Macomb
Hamtramck	Wayne
Hancock	Houghton
Harbor Beach	Huron
Harbor Springs	Emmet
Hart	Oceana
Hartford	Van Buren
Hastings	Barry
Hazel Park	Oakland
Highland Park	Wayne
Hillsdale	Hillsdale
Holland	Ottawa
Holly	Oakland
Homer	Calhoun
Houghton	Houghton
Howell	Livingston
Hubbell	Houghton

CITY	COUNTY
Hudson	Lenawee
Hudsonville	Ottawa
Huntington Woods	Oakland
Imlay City	Lapeer
Inkster	Wayne
Ionia	Ionia
Iron Mountain	Dickinson
Iron River	Iron
Ironwood	Gogebic
Ishpeming	Marquette
Ithaca	Gratiot
Jackson	Jackson
Jonesville	Hillsdale
Kalamazoo	Kalamazoo
Kalkaska	Kalkaska
Kingsford	Dickinson
Lake Linden	Houghton
Lake Odessa	Ionia
Lake Orion	Oakland
Lake Orion Heights	Oakland
Lakeview	Calhoun
L'Anse	Baraga
Lansing	Ingham
Lapeer	Lapeer
Lapeer Heights	Genesee
Laurium	Houghton
Lawton	Van Buren
Leslie	Ingham
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Livonia	Wayne
Ludington	Mason
Mancelona	Antrim
Manchester	Washtenaw
Manistee	Manistee
Manistique	Schoolcraft
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Marcellus	Cass
Marine City	St. Clair
Marlette	Sanilac
Marquette	Marquette
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Marysville	St. Clair
Mason	Ingham
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Menominee	Menominee
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Middleville	Barry
Midland	Midland
Milan	Monroe & Washtenaw
Milford	Oakland
Millington	Tuscola
Monroe	Monroe
Montague	Muskegon
Morenci	Lenawee
Mount Clemens	Macomb
Mount Morris	Genesee
Mount Pleasant	Isabella
Munising	Alger
Muskegon	Muskegon
Muskegon Heights	Muskegon
Nashville	Barry
Negaunee	Marquette
Newaygo	Newaygo
New Baltimore	Macomb & St. Clair
Newberry	Luce
New Buffalo	Berrien
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CITY	COUNTY
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North Muskegon	Muskegon
Northville	Wayne & Oakland
Norway	Dickinson
Oak Park	Oakland
Onaway	Presque Isle
Ontonagon	Ontonagon
Otsego	Allegan
Ovid	Clinton
Owosso	Shiawassee
Oxbow	Oakland
Oxford	Oakland
Painesdale	Houghton
Parchment	Kalamazoo
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Paw Paw	Van Buren
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Pentwater	Oceana
Perry	Shiawassee
Petersburg	Monroe
Petoskey	Emmet
Pigeon	Huron
Pinconning	Bay
Plainwell	Allegan
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Plymouth	Wayne
Pontiac	Oakland
Portage	Kalamazoo
Port Huron	St. Clair
Portland	Ionia
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Ramsay	Gogebic
Reading	Hillsdale
Reed City	Osceola
Republic	Marquette
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River Rouge	Wayne
Riverview	Wayne
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Saint Clair	St. Clair
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Staley, Hugh O.....Omer
Stinson, W. S.....101 W. John Street, Bay City
Switzer, Lars W.....Chevrolet Motor Company, Bay City
Taheri, Z. E.....511 Center Avenue, Bay City
Tarter, Clyde S.....1712 Center Ave., Bay City
Tompkins, Dana A.....Pinconning
Urmston, Paul R.....303 Davidson Bldg., Bay City
Wilcox, James W.....1115 Fifth Ave., Bay City
Wilson, Thomas G.....900 N. Jackson, Bay City
Woodburne, H. L.....Davidson Building, Bay City
Wright, T. B. (M).....101 W. John Street, Bay City
Zaremba, Aloysius J. (L).....108 S. Madison Ave., Bay City
Ziliak, A. L.....3393 Kiesel Road, Bay City

BERRIEN COUNTY

Allis, Lyle M.....113 Portage St., Buchanan
Anderson, Bertha M. G. 262 Pleasant St., Benton Harbor
Bailey, J. H.....2150 Samuel Ave., Benton Harbor
Beal, G. N.....Sheperd & Benning Bldg., St. Joseph
Benner, Wm. H.....40 B. Lake Shore, St. Joseph
Bliesmer, A. F.....505 Pleasant St., St. Joseph
Bronfenbrenner, Jack..316 Fidelity Bldg., Benton Harbor
Bush, C. W.....Box 221, Raiford, Florida
Butler, W. J.....519 Ship Street, St. Joseph
Cawthorne, H. J.....230 Pipestone, Benton Harbor
Chickering, W. A.....Mercy Hospital, Benton Harbor
Conway, Joseph Watervliet
Conybeare, R. C.....416 Fidelity Bldg., Benton Harbor
Cooper, W. L.....275 Paw Paw St., Coloma
Cowdery, K. H.....1600 Niles, St. Joseph
Crowell, Richard C.....519 Ship St., St. Joseph
Dalgleish, A. J.....460 N. Main St., Watervliet
Dunnington, Ruel N.....143 Pipestone, Benton Harbor
Eidson, Hazel D.....Berrien Springs
Elghammer, R. M.....190 Michigan St., Benton Harbor
Elliott, J. Colin.....207½ E. Front St., Buchanan
Emery, C. S.....1020 Niles St., St. Joseph
Emery, W. K.....1020 Niles St. St. Joseph
Faber, Michael....209 State Bank Bldg., Benton Harbor
Fattic, G. R., Jr.....806 S. Third St., Niles
Feeley, M. J.....612 Elm St., St. Joseph
Feldmann, Robert J.....P.O. Box 124, Bridgman
Foucek, B. C.....4 Maple St., Three Oaks
Friedman, M. E.....Box 87, New Buffalo
Galles, James O.....275 Paw Paw St., Coloma
Garrett, Evan L.....61 N. St. Joseph, Niles
Gillette, Clarence Niles
Goddard, G. B.....Berrien County Hosp., Berrien Center
Green, Barbara.....2600 Morton Ave., St. Joseph
Green, R. L.....2600 Morton Ave., St. Joseph
Gustin, R. D.....100½ Ferry St., Berrien Springs
Harrison, L. L.....304 Main St., Niles
Hassan, D. Kent (M)....1501 N. 15th St., Boise, Idaho
Hayes, Thomas P.....922 Main St., St. Joseph
Heath, D. D.....P.O. Box 124, Bridgman
Henderson, Fred C.....703 E. Main St., Niles
Hershey, N. J.....122 Grant St., Niles
Holt, Robert E., Jr.....122 Grant St., Niles
Howard, F. W.....131 East Main St., Benton Harbor
Huff, H. D.....126 E. Main St., Niles
Irgens, Edwin.....11 Peoples State Bank, St. Joseph
Johnston, Wm. H.....St. Joseph Mem. Hosp., St. Joseph
Kelsall, H. I.....1600 Niles, St. Joseph
Kennedy, Francis A.....239 Pipestone St., Benton Harbor
King, B. B.....210 Fidelity Bldg., Benton Harbor
King, Frank A., Jr.....610 Fidelity Bldg., Benton Harbor
Klos, Henry J.....2121 Niles, St. Joseph
Landgraf, R. L.....122 Grant St., Niles
Leva, John B.....312 Fidelity Bldg., Benton Harbor
Lindenfeld, Frederick H.....8 N. St. Joseph, Niles
Lininger, R. E.....Mercy Hospital, 700 Empire Ave., Benton Harbor
Manning, John T.....922 Main St., St. Joseph
McNabb, Arthur A.....469 Main St., Watervliet
Mesirow, S. M.....610 Fidelity Bldg., Benton Harbor
Miller, E. A.....420 South Kimmel, Berrien Springs
Moore, T. Scott.....107 N. Second St., Niles
Oswaldas, Nakas.....110 Main St., Buchanan
Ozeran, Charles J.....98 Water St., Benton Harbor
Padelford, W. J.....922 Main St., St. Joseph
Peshka, D. K.....61 N. St. Joseph, Niles
Polansky, Sanford.....84 West Main St., Benton Harbor
Porter, C. B.....170 Wall St., Benton Harbor
Pritchard, Harold M.....1 South Fifth St., Niles
Rague, P. O.....1287 Senica Rd., Benton Harbor
Ray, Dean K.....617 Elm St., St. Joseph
Reagan, Robert E.....190 Michigan St., Benton Harbor
Rice, Franklyn A., Sr.....324 No. Fourth St., Niles
Rice, Franklyn G.....324 N. Fourth St., Niles
Richmond, D. M.....314½ State St., St. Joseph
Ruth, J. G.....925 Pipestone St., Benton Harbor
Skinner, J. W.....2716 Thayer Drive, St. Joseph
Sowers, Bouton F.....210 Fidelity Bldg., Benton Harbor
Strayer, John W.....122 Grant St., Niles
Strick, Marvin H.....311 Fidelity Bldg., Benton Harbor
Stulik, C. K.....Union Pier
Swingle, Alvin J.....84 W. Main, Benton Harbor
Thorup, D. W.....610 Fidelity Bldg., Benton Harbor
Urist, Maurice D.....454 Pipestone, Benton Harbor
Valantiejus, J. A.....Cedar Lane, New Buffalo
Vastine, Russell J., Jr.....113 N. Portage, Buchanan
Westervelt, H. O.....539 Pearl St., Benton Harbor
Winegar, A. C.....Route No. 1, Box 326, Stevensville
Woodford, Hackley E.....191 Michigan, Benton Harbor
Zick, L. H.....1626 Langley Ave., St. Joseph

BRANCH COUNTY

Aldrich, Napier S.....15 E. Pierce St., Coldwater
Andrews, Frank A.....Box 148, Coldwater
Bailey, James E.....292 E. Chicago St., Coldwater
Beck, Perry C.....235 N. Walker St., Bronson
Coates, C. A.....105 E. Chicago St., Quincy
Culver, Bert W. (L).....72 Division, Coldwater
Culver, Dean T.....78 Division, Coldwater
Fraser, R. J.....22 W. Pearl St., Coldwater
Gomley, Henry C.....108 E. Chicago, Bronson
Harris, D. M.....35 S. Sprague St., Coldwater
Heffelfinger, J. C.....292 E. Chicago St., Coldwater
Leitch, R. M.....304 N. Broadway, Union City
McLain, R. W. (L).....37 Janoah Ave., Battle Creek
Meier, H. J.....87 W. Pearl St., Coldwater
Mitchell, H. C.....State Home & Trg. School, Coldwater
Mooi, H. R.....292 E. Chicago St., Coldwater
Moss, H. L.....292 E. Chicago St., Coldwater
Nettleman, W. E.....87 W. Pearl St., Coldwater
Olmstead, K. L.....70 Marshall St., Coldwater
Rennell, E. J.....Box 148, Coldwater
Rick, J. J.....50 Division St., Coldwater
Smith, R. E.....304 N. Broadway, Union City
Thomas, J. A.....18 N. Monroe St., Coldwater
Wade, R. L. (L).....116 E. Chicago St., Coldwater
Walton, N. J.....61 E. Chicago St., Quincy
Weidner, H. R.....50 Division St., Coldwater

CALHOUN COUNTY

Albright, A. A.....401 Security Bank Bldg., Battle Creek
Amos, Norman H...1704 Wolverine Tower, Battle Creek
Anderson, Harold E.....501 Post Bldg., Battle Creek
Barden, Stuart P.....Leila Y. Post Montgomery Hosp., Battle Creek
Baribeau, Roy H.....531 Post Bldg., Battle Creek
Becker, Harry F.....Route 3, Box 303A, Battle Creek
Berghorst, John (A).....VA Hospital, Battle Creek
Beuker, Herman.....120 E. Mich. Ave., Marshall
Bodine, Harold R.....716 Michigan National Bank Bldg., Battle Creek
Bonifer, P. P.....231 North Ave., Battle Creek
Brainard, C. W...1002 Security Bank Bldg., Battle Creek
Brown, R. W.....203 Capital Ave., N.E., Battle Creek
Campbell, Alice F.....103 E. Mulberry St., Albion
Campbell, Jack....611 Michigan Nat. Bank, Battle Creek
Campbell, R. J.....140 Capital Ave. N.E., Battle Creek
Capron, Manley J.....618 Post Bldg., Battle Creek
Chandler, E. M...1407 Security Bank Bldg., Battle Creek
Chynoweth, W. R.....207 Post Bldg., Battle Creek
Coakes, J. E.....112 W. Mansion, Marshall
Colquhoun, G. F.....401 Security Tower, Battle Creek
Cooper, J. E. (L).....298 W. Van Buren, Battle Creek
Curry, Robert K.....Homer
Daly, H. L., Jr.....318½ S. Superior St., Albion
Daly, M. S.....318½ S. Superior St., Albion
D'Aversa, Generoso 1004 E. Broadwell, Albion
Diamante, Paul J.....1704 Wolverine Tower, Battle Creek
Dickson, A. R.....1002 Sec. Bank Bldg., Battle Creek
Dietrich, A. M., Jr. (M).....Veterans Adm. Hospital Batavia, New York
Dodge, W. M., Jr.....1207 Wolverine Tower, Battle Creek
Fairbanks, Stephen.....P.O. Box 67, Albion
Ferazzi, Patrick S.....140 Capital Ave. N.E., Battle Creek
Finch, D. L.....719 S.W. Capital Ave., Battle Creek
Fisher, Robert E.....158 Capital Ave. N.E., Battle Creek
Forsyth, J. E.....Warren State Hospital, Warren, Pa.
Fraser, R. H.....1112 Security Bank Bldg., Battle Creek
Funk, L. D.....133 W. Burr Oak, Athens
Gething, Joseph W. (L).....803 Security Bank Bldg., Battle Creek
Giddings, A. M. (L)....Battle Creek San., Battle Creek
Gilfillan, Margery J. (L)..Battle Creek San., Battle Creek
Gorsline, C. S. (L).....85 Orchard Place, Battle Creek
Graubner, F. L.....Bogar Theatre Bldg., Marshall
Hamady, Alfred....140 Capitol Ave., N.E., Battle Creek
Hanan, Robert (A)....Leila Y. Post Montgomery Hosp., Battle Creek
Hansen, E. L.....216 North Ave., Battle Creek
Hansen, Harvey C.....417 Post Bldg., Battle Creek
Haughey, Wilfrid (L).....610 Post Bldg., Battle Creek
Heald, C. W. (L).....67 Oaklawn, Battle Creek
Henderson, Philip M.....109 West Erie St., Albion
Herman, Louis (A).....VA Hospital, Battle Creek
Herzer, Henry A. (L).....208 Irwin Ave., Albion
Hibbs, Donald K.....622 Post Bldg., Battle Creek
Holtom, B. G.....815 Security Bank Bldg., Battle Creek
Hoyt, A. A. (L).....141 N. Merwood Dr., Battle Creek
Hubly, James W...1407 Sec. Nat. Bk. Bldg., Battle Creek
Humphrey, A. A.....914 Sec. Bank Bldg., Battle Creek
Humphrey, A. E.....122 N. Madison, Marshall
Jeffrey, J. R.....Battle Creek San., Battle Creek
Jones, Aubrey H. (A)....Veterans Hospital, Fort Custer
Jones, E. F. (A).....VA Hospital, Battle Creek
Jones, T. K.....118 W. Green St., Marshall
Keagle, Leland R.....196 North Ave., Battle Creek
Keeler, K. B.....205½ S. Superior St., Albion
Kelleher, George T.....613 Post Bldg., Battle Creek
Kimball, A. S., Jr.....196 Capitol Ave., N.E., Battle Creek
Kinde, M. R.....48 Merwood Drive, Battle Creek
Kingsley, Paul C.....191 College, Battle Creek
Kolvoord, Theodore (R)....47 Minges Rd., Battle Creek
LaFrance, N. Francis (A)....Veterans Hosp., Fort Custer
Lam, Francis L.....408½ Capital, S.W., Battle Creek
Lancaster, V. B.....231 North Ave., Battle Creek
Lentz, C. S. (A)....233 W. Manchester St., Battle Creek
Levine, S. L. (A).....VA Hospital, Battle Creek
Levy, Joseph, Jr.....231 North Ave., Battle Creek
Lewis, W. B. (L)....110 Irving Park Drive, Battle Creek
Lowe, Kenneth H.....401 Sec. Bank Bldg., Battle Creek
Lowe, S. T.....231 North Ave., Battle Creek
Lynk, S. M. (A).....VA Hospital, Battle Creek
MacGregor, Archibald E. (L)....1510 Sec. Bank Bldg., Battle Creek
Marino, S. G. (A).....VA Hospital, Battle Creek
McCuaig, A. G.....719 S.W. Capital Ave., Battle Creek
Meister, F. O.....806 Security Tower, Battle Creek
Melges, Fred J.....1506 Sec. Bank Bldg., Battle Creek
Mercer, C. M.....512 Michigan Nat. Bank Bldg., Battle Creek
Mitton, O. W.....Battle Creek San., Battle Creek
Morrison, D. B.....719 S.W. Capital Ave., Battle Creek
Mullenmeister, H. F.....275 Capital, N.E., Battle Creek
Mustard, Russell L.....1407 Sec. Bank Bldg., Battle Creek
Norgan, Anne (A).....VA Hospital, Battle Creek
Olsen, A. L. (A).....VA Hospital, Battle Creek
Orr, E. H. (A).....VA Hospital, Battle Creek
Parkinson, Charles E.....Leila Hospital, Battle Creek
Patrick, Gilbert T.....505 Sec. Bank Bldg., Battle Creek
Pearson, Donald J.....255 North Ave., Battle Creek
Pier, C. T. (A).....VA Hospital, Battle Creek
Power, J. R.....140 N.E. Capital, Battle Creek
Robbert, John.....191 College, Battle Creek
Robins, Hugh B.....237 Fremont, Battle Creek
Rorich, Wilma Weeks.....166 Capital Ave., N.E., Battle Creek
Rosenfeld, J. E.....158 Capital, N.E., Battle Creek
Royer, Clark W.....1331 W. Michigan Ave., Battle Creek
Rowan, Russell C.....205½ S. Superior, Albion
Sandy, W. A. (A).....VA Hospital, Battle Creek
Schwarz, Frank W.....31 Orchard Place, Battle Creek
Sharp, A. D. (R).....308 S. Superior, Albion
Sharp, W. T. (A).....VA Hospital, Battle Creek
Shellenberger, Herbert M...108½ W. Michigan, Marshall
Shipp, Leland P.....1414 Sec. Bank Bldg., Battle Creek

Sibilsky, A. C. (A).....Veterans Admin., Battle Creek
Simpson, Robert S...1507 Wolverine Tower, Battle Creek
Slagle, George W.....203 Capital Ave., N.E., Battle Creek
Sleight, James D.....401 Security Bank Bldg., Battle Creek
Smith, J. S. (A).....VA Hospital, Battle Creek
Smith, R. L. (A)....681 Capital Ave., S.W., Battle Creek
Spencer, C. M.....308½ S. Superior St., Albion
Stadle, Wendell H. (R).....607 Jennings Landing Goguac Lake, Battle Creek
Stiefel, Richard S.....1407 Sec. Bank Bldg., Battle Creek
Strohmenger, Frank J.....400½ S. Superior St., Albion
Tannenholz, Harold S.....1614 Security Bank Bldg., Battle Creek
Taylor, Clifford B.....308½ S. Superior St., Albion
Tazelaar, Myron A.....219 N. Madison, Marshall
Vander Kamp, Harry (A).....VA Hospital, Battle Creek
VanderVoort, Wm. A. (L).....Battle Creek San., Battle Creek
VanZandt, M. M. (A).....Federal Civil Defense, Battle Creek
Verity, Lloyd E.....806 Security Tower, Battle Creek
Walker, Charles S.....709 W. Van Buren, Battle Creek
Walters, John F.....41 North Washington, Battle Creek
Way, Kenneth E.....111 N. Jefferson St., Marshall
Wemmer, Keith S.....1501 W. Michigan Ave., Battle Creek
Wencke, Carl G...1015 Security Bank Bldg., Battle Creek
Whitney, J. M. (A)..143 Frelinghuysen Ave, Battle Creek
Williams, E. S. (A).....271 Chestnut St., Battle Creek
Winslow, Sherwood B.....1509 Security National Bank Bldg., Battle Creek
Worgess, Duane R.....45 W. Territorial Road, Battle Creek
Yannitelli, S. A.....1331 W. Michigan Ave., Battle Creek
Zheutlin, Bertram.....50 Adams St., Battle Creek
Zindler, George A.....1206 Security Tower, Battle Creek

CASS COUNTY

Adams, Uriah M.....Marcellus
Clary, Rudolph I.....126½ Front St., Dowagiac
Comstock, L. D., Jr.....216½ S. Front St., Dowagiac
Everett, Dan W.....Edwardsburg
Hickman, J. K.....212½ S. Front St., Dowagiac
Loupee, George E.....Dowagiac
Loupee, S. L. (L).....Dowagiac
Pierce, Frank L. (L).....Dowagiac
Pierce, K. C.....140½ S. Front, Dowagiac
Zwergel, E. H.....Cassopolis

CHIPPEWA-MACKINAC COUNTIES

Allott, H. R.....300 Court St., Sault Ste. Marie
Bandy, Festus C. (R)....14880 Grandville Blvd., Detroit
Blair, Herbert M.....300 Court St., Sault Ste. Marie
Blue, J. J.....Cedarville
Clausen, C. H.....7854 E. Morrow Circle, Sault Ste. Marie
Conrad, G. R. (E).....521 Ashmun, Sault Ste. Marie
Finlayson, D. D.....301 E. Spruce St., Sault Ste. Marie
Futterer, Le Roy A.....Mackinac Island
Goldberg, A. H.....301 Ashmun St., Sault Ste. Marie
Hagele, Marie A.....300 Court St., Sault Ste. Marie
Hague, Howard St. Ignace
Hamel, Herbert E.....St. Ignace
Harrington, H. M.....519 Ashmun, Sault Ste. Marie
Howe, Donnell C.....300 Court St., Sault Ste. Marie
Howe, Gertrude E.....300 Court St., Sault Ste. Marie
Mackie, T. B.....300 Court St., Sault Ste. Marie
McBryde, L. M.....Masonic Bldg., Sault Ste. Marie
Mertaugh, W. F.....Central Savings Bank Bldg., Sault Ste. Marie
Montgomery, B. T.....301 E. Spruce St., Sault Ste. Marie
Rhind, E. S.....300 Court St., Sault Ste. Marie
Thompson, C. F.....Drummond Island
Trapasso, T. J.....521 Ashmun St., Sault Ste. Marie
Venier, A. G.....519 Ashmun St., Sault Ste. Marie
Wallen, L. J.....409 Ashmun St., Sault Ste. Marie
Willison, Clayton (E).....509 St. James St., Sault Ste. Marie
Yale, I. V. (L).....200 Ashmun St., Sault Ste. Marie

CLINTON COUNTY

Bennett, George W.....Elsie
Cook, Bruno C.....Westphalia
Elliott, Bruce R.....Ovid
Fillinger, Wells B.....Ovid
Foo, Charles T.....St. Johns
Grost, James M.....210 E. Walker St., St. Johns
Henthorn, A. C.....RFD No. 3, St. Johns
Kirker, J. G.....Fowler
Leider, T. L.....Ovid
Luton, F. E. (E).....St. Johns
McWilliams, W. B.....Maple Rapids
Russell, Sherwood R.....106 Maple St., St. Johns
Sheline, V. L.....Medical Center, Ithaca
Slagh, Earl M.....Elsie
Smith, F. W.....St. Johns
Stephenson, W. F.....510 E. Walker St., St. Johns
Stoller, Paul F.....308 N. Mead St., St. Johns

DELTA-SCHOOLCRAFT COUNTIES

Anderson, F. C.....212 S. Tenth Ave., Escanaba
Benson, G. W. (A).....Ludington St., Escanaba
Bernier, A. B.....200 S. Cedar St., Manistique
Boyce, D. H.....1007 Ludington, Escanaba
Carlton, A. J. (L).....502 S. Seventh St., Escanaba
Dehlin, J. R.....8 S. Eleventh St., Gladstone
Fyvie, James H.....202 S. Cedar, Manistique
Groos, H. Q.....1015 S. First, Escanaba
Groos, L. P.....1015 S. First, Escanaba
Harrison, William C.....403 S. Seventh St., Escanaba
Hult, O. S.....1005 Delta Ave., Gladstone
Jensen, Carroll Manistique
Kee, C. E.....8 S. Eleventh St., Gladstone
Lemire, D. F.....1104 S. First, Escanaba
Lemire, W. A.....1106 S. First, Escanaba
Lindquist, N. L.....205 S. 10th St., Escanaba
McInerney, T. A.....1221 Ludington, Escanaba
Miller, A. H. (L).....904 Wisconsin, Gladstone
Nagy, Charles.....Bark River
Olson, G. J.....8 S. Eleventh St., Gladstone
Ryde, R. E.....Lake Shore Drive, Escanaba
Welch, J. J. (R).....Lake Shore Drive, Escanaba
Waters, Duane.....200 S. Cedar St., Manistique
Wehner, Merle E.....Manistique

DICKINSON-IRON COUNTIES

Addison, E. R.....412 Superior St., Crystal Falls
Alexander, W. H.....Commercial National Bank Bldg., Iron Mountain
Anderson, Donald T.....400 Woodward Ave., Iron Mountain
Boyce, G. H. (L).....First National Bank Bldg., Iron Mountain
Browning, J. L.....212 East B St., Iron Mountain
Carlson, R. E.....Commercial Bank Bldg., Iron Mountain
Cooper, C. A.....230 Washington Ave., Stambaugh
Frederickson, Geron (R).....826 East "A" St., Iron Mountain
Gladstone, W.....804 Main St., Norway
Hayes, Willard N.....716 Main St., Norway
Huron, W. H.....107 East "A" St., Iron Mountain
Irvine, L. E.....326 W. Genesee, Iron River
Kofmehl, Wm. J.....Stambaugh
McEachran, H. D.....Commercial Bank Bldg., Iron Mountain
Palm, E. T.....412 Superior St., Crystal Falls
Retallack, R. C.....415 Third St., Iron River
Schmutzler, W. A.....373 Woodward, Iron Mountain
Schroeder, J. M.....1115 Stockbridge, Iron Mountain
Smith, Donald R.....105 East A St., Iron Mountain
Steinke, C. G.....517 Stephenson, Iron Mountain

EATON COUNTY

Arner, Fred L.....231½ N. Main St., Bellevue
Brown, B. P.....339 S. Cochran St., Charlotte
Carothers, Daniel.....315 S. Cochran, Charlotte
Cook, J. Maxwell.....314 S. Cochran St., Charlotte
DeLand, C. L.....121 S. Main St., Olivet
Engle, P. H.....121 S. Main St., Olivet
Garlock, F. C.....Grand Ledge
Hannah, Harry W.....326 S. Cochran St., Charlotte
Harrod, Gordon R.....Hathaway Bldg., Grand Ledge
Hoffer, W. E.....115 S. Washington St., Charlotte
Imthun, E. F.....113 E. Jefferson, Grand Ledge
Johnson, Robert C. (M).....3700th Med. Gp. ATRC Lackland A.F.B., San Antonio, Texas
Knecht, Evan E. (M).....Charlotte
Landick, R. E.....111 S. Cochran St., Charlotte
Meinke, A. H., Jr.....101 W. Plain St., Eaton Rapids
Meinke, R. K. (A).....523 11th St., S.E., Rochester, Minn.
Myers, Albert W.....Pottersville
Peltason, Walter.....Washington St., Sunfield
Riley, J. L.....201½ S. Cochran St., Charlotte
Sevener, Lester G.....236 S. Cochran St., Charlotte
Sherman, E. B.....702 S. Main St., Eaton Rapids
Shockley, B. F. (M).....2009 Pearson Drive, Midwest City 10, Okla.
Van Ark, Bert.....101 West Plain, Eaton Rapids
Van Ark, H. F.....101 W. Plain St., Eaton Rapids
Whitlock, Stanley C.....Dimondale
Willits, C. O.....201 W. Seminary, Charlotte

GENESEE COUNTY

Adams, Burnell H.....2002 E. Court St., Flint
Adams, Chester H.....1114 Beach St., Flint
Anderson, H. H.....11280 N. Saginaw, Mt. Morris
Anderson, J. L.....220 Genesee Bank Bldg., Flint
Andrews, Nelson A. C.....310 E. Main St., Flushing
Anthony, George E. R.....1015 Detroit St., Flint
Baird, W. C.....504 National Bldg., Flint
Bald, Frederick W.....610 Mott Foundation Bldg., Flint
Barbour, Fleming A.....1439 Mott Foundation Bldg., Flint
Barger, A. J.....220 Genesee Bank Bldg., Flint
Baske, Franklin W.....923 Maxine St., Flint
Batdorf, John.....Goodrich General Hosp., Goodrich
Bateman, L. G.....1928 Lewis, Flint
Benson, John C., Jr.....402 W. 2nd St., Flint
Berman, Harry.....3309 Fenton Rd., Flint
Bernstein, Eli N.....409 Kresge Bldg., Flint
Best, J. A.....G 4047 Clio Road, Flint
Beyer, George D.....145 Vienna St., Clio
Bishop, D. L.....2226 Detroit St., Flint
Bogart, Leon M.....1008 Genesee Bank Bldg., Flint
Boles, William P.....714 Beach St., Flint
Bradley, Robert M.....420 Genesee Bank Bldg., Flint
Brain, R. Gordon.....509 First Nat. Bank Bldg., Flint
Branch, Hira E.....821 Mott Fd. Bldg., Flint
Brasie, Donald R.....907 Citizens Bank Bldg., Flint
Briggs, Guy D.....206 Genesee Bank Bldg., Flint
Bruce, William W.....5045 Morrish Road, Swartz Creek
Bryant, D. R.....621 Mott Foundation Bldg., Flint
Buchanan, William F.....104 W. Caroline St., Fenton
Burkett, L. V.....County Court House, Flint
Burnell, Max R.....3301 Westwood Parkway, Flint
Caster, E. W. (L).....10505 LaSalle Blvd., Royal Oak
Chambers, Myrton S.....839 Mott Fdtn. Bldg., Flint
Chase, W. D.....702 Ballenger Hwy., Flint
Clark, Clifford P. (L).....11111 S.W. 62nd Ave., Miami 43, Fla.
Clark, R. L.....1301 Flushing Road, Flint
Collins, J. I.....424 W. Woodruff, Flint
Colwell, C. W.....706 Citizens Bk. Bldg., Flint
Connell, John T.....305 Dryden Bldg., Flint
Conover, George V.....420 Genesee Bank Bldg., Flint
Conover, McClellan B.....312 Paterson Bldg., Flint
Conover, T. Sidney.....420 Genesee Bk. Bldg., Flint
Cook, Henry.....326 Genesee Bank Bldg., Flint
Covert, Floyd (L).....116 Lord St., Gaines
Craig, William G. (M).....G 3176 W. Court St., Flint
Credille, Barney A.....813 Genesee Bank Bldg., Flint
Curry, George J.....402 Genesee Bank Bldg., Flint
Curtin, John H.....A.C. Spark Plug Plant, Flint
Cutler, G. C. (M).....5629 Taft, La Jolla, Calif.
Davis, R. C.....3029 Flushing Rd., Flint
Dawson, Ralph E.....1021 Mott Foundation Bldg., Flint
DelZingro, Nicholas.....Davison
Denholm, Nan H.....7506 Davison, Flint
Dettman, C. K.....Nanita Drive, Montrose
Dickstein, Bernard.....605 National Bldg., Flint
Dimond, Edwin G.....209 Genesee Bk. Bldg., Flint
Dodds, Frederick E.....1336 Lewis St., Flint
Dodds, Max.....608 First National Bldg., Flint
Dorsey, Philip W.....220 Genesee Bank Bldg., Flint
Drewyer, Glenn E.....907 Welch Blvd., Flint
Dykewicz, R. A.....3705 Beecher Rd., Flint
Eichhorn, E. M.....1112 Mott Fdtn. Bldg., Flint
Eickhorst, Thomas N.....409 Dryden Building, Flint
Elliott, Hardie B.....1634 Mott Fdtn. Bldg., Flint
Engelman, R. M.....717 Mott Fdtn. Bldg., Flint
Ettinger, Ralph D.....111 S. Walnut St., Fenton
Farah, Ben S.....5001 N. Saginaw St., Flint
Farhat, Maynard M.....620½ W. Court St., Flint
Fee, Manson G.....311 Kresge Bldg., Flint
Ferris, J. W.....426 N. State St., Davison
Finkelstein, Theodore.....1415 Broadway, Flint
Flynn, Southard T.....1121 Mott Fdtn. Bldg., Flint
Foley, Sydney I.....2217 Mason St., Flint
Forrer, G. R.....307 E. Court St., Flint
Fuller, Harvey T.....820 Genesee, Mt. Morris
Gelenger, S. M.....702 Ballenger Hwy., Flint
Gleason, N. A.....1310 Mott Fdtn. Bldg., Flint
Goering, George R. (L).....519 Dryden Building, Flint
Golden, H. Maxwell.....218 E. Court St., Flint
Goodfellow, B. T. (L).....506 Page, Flint
Gorne, Saul S.....619 Clifford St., Flint 3
Grady, Donald R.....1515 Woodslea Drive, Flint
Griffin, Ernest P., Jr.....621 Mott Fdtn. Bldg., Flint

Grover, H. F.....310 Dryden Bldg., Flint
Guile, Gurdon S.....1621 Dupont St., Flint
Gundry, G. L.....11736 Saginaw, Grand Blanc
Gutov, Isadore H.....607 Citizens Bank Bldg., Flint
Gutov, J. J.....607 Citizens Bank Bldg., Flint
Guyon, J. L.....302 W. Pierson Rd., Flint
Guyon, Mary Ann.....302 W. Pierson Rd., Flint
Hackley, Richard D. (M).....4453rd USAF Hospital, Shaw AFB, S. C.
Hague, Robert F.....210 E. Court St., Flint
Hamady, Ruth E.....228 Welch Blvd., Flint
Hamilton, A. J.....3100 Van Slyke Road, Flint
Harper, R. Homer.....Buick Motor Company, Flint
Hauser, Frederick V.....1012 Mott Fdtn., Bldg., Flint
Hawkins, James E.....1226 Leith St., Flint
Hennessey, Charles (M).....(No Address)
Hing, William.....326 Stockdale St., Flint
Hiscock, Harold H.....1315 Mott Fdtn. Bldg., Flint
Hooper, Kendall.....714 Beach St., Flint
Hubbard, Wm. B.....302 Patterson Bldg., Flint
Hufton, W. L.....721 W. Sixth Ave., Flint
Hurd, Clayton E.....300 Roberts St., Fenton
Jaarsma, R. A.....1604 Mott Foundation Bldg., Flint
Jackson, D. P.....Davison
James, R. E.....3001 S. Saginaw, Flint
Johnson, Arthur H.....3219 North St., Flint
Johnson, F. D.....Clio
Johnson, Frank D.....312 Paterson Bldg., Flint
Johnson, Raymond E.....907 Welch Blvd., Flint
Jones, Lafon (L).....1301 Flushing Road, Flint
Jordan, P. H.....302 W. Second Ave., Flint
Judd, A. E.....2315 Davison Road, Flint
Kaufman, L. D.....4002 N. Saginaw, Flint
Kimbrough, C. B.....1402 S. Saginaw St., Flint
Knapp, William D.....1621 Mott Fdtn. Bldg., Flint
Koop, Chester S.....2503 Detroit St., Flint
Kretchmar, Arthur H.....608 First National Bldg., Flint
Kurtz, John J.....421 Dryden Bldg., Flint
Laird, James I.....10114 Main St., Goodrich
Leach, J. Leonidas.....3007 Industrial Ave., Flint
Le Mieux, L. L., Jr.....701 W. Dayton St., Flint
Lewis, Thomas E.....3520 Richfield Road, Flint
Limbach, David R.....Hurley Hospital, X-Ray Dept., Flint
Livesay, Jackson E.....621 Mott Fdtn. Bldg., Flint
Logan, G. W. (L).....1603 N. Broadway, Hastings
Lukens, T. John.....608 East Court St., Flint
Lyttle, Sydney N.....615 Mott Foundation Bldg., Flint
MacGregor, Delbert M.....701 W. Dayton, Flint
Macksood, Joseph A.....2501 N. Saginaw St., Flint
Manwaring, John T.....1303 Mott Fdn. Bldg., Flint
Mathias, Berton J.....1301 Flushing Road, Flint
McCabe, Margaret M.....420 Genesee Bank Bldg., Flint
McClellan, Junius W.....Chevrolet Flint Assembly Div., Van Slyke at Atherton Rd., Flint 3
McCubbrey, David, 1st Lt., MC (M).....(No Address)
McGarry, Burton G. (L) 202 E. Caroline St., Fenton
McGarry, Roy A.....418 Dryden Bldg., Flint
McKenna, Oscar W. (E).....325 Stevens St., Flint
McLeod, K. W. A.....2801 N. Saginaw, Flint 5
McMurray, R. J.....709 Genesee Bank Bldg., Flint
McTaggart, David, Capt. MC (M).....388 TAC Hospital, APO 87, New York, N. Y.
Michael, S. R.....907 Welch Blvd., Flint
Michels, Robert M.....409 N. Saginaw St., Flushing
Michelson, R. B.....5001 N. Saginaw St., Flint
Miller, E. E. (L).....2902 Detroit St., Flint
Miller, Loren Eugene.....2645 Corunna Road, Flint
Miltich, Anthony J.....415 Dryden Bldg., Flint
Moore, Glenn.....323 W. Second St., Flint
Moore, Kenneth B.....1613 Mott Fdtn. Bldg., Flint
Moore, Wesley P.....802 Tilden, Flint
Morrish, R. S.....1715 Crescent Drive, Flint
Morrison, William H.....205 Perry Road, Grand Blanc
Morrissey, V. H.....101 Stockdale St., Flint
Mosier, Edward C.....115 Lake St., Otisville
Murphy, E. Grant.....1825 Chelsea Circle, Flint
Neiswander, Paul L.....Fisher Body Truck Plant, Grand Blanc
Nicholls, W. W.....1301 Flushing Road, Flint
Odle, Ira D.....201 Welch Blvd., Flint
Orr, J. Walter (L).....Orrs Point, Lake Fenton, Fenton
Osher, Seymour L.....218 E. Court St., Flint
Pfeifer, Archibald C.....11610 N. Saginaw St., Mt. Morris
Phelps, Lynn.....Goodrich General Hosp., Goodrich
Phillips, R. L.....Bay View Parkway, Nokomis, Fla.
Phillips, Robert W.....829 Stockdale, Flint
Pickering, W. H.....1602 Ballenger Hwy., Flint
Portney, Jack.....2415 Detroit St., Flint
Pratz, Oliver C.....1303 Detroit St., Flint
Preston, Otto J.....300 N. Chevrolet Ave., Flint
Purcell, F. L., Jr...Ternstedt Plant. Coldwater Rd., Flint
Quin, John, Jr.....5003 N. Saginaw St., Flint
Ragan, Russell M.....3602 Beecher, Flint 3
Rapport, Richard L.....715 Mott Foundation Bldg., Flint
Rawling, J. C.....1121 Mott Fdtn. Bldg., Flint
Rawlings, J. Mott.....1601 Neome Drive, Flint
Reichard, Orill (L).....1507 Detroit St., Flint
Richardson, Josephine W.....2610 Davison Road, Flint
Rieth, George F.....1402 Davison Road, Flint
Roberts, Floyd A. (L).....428 Thompson St., Flint
Rowe, John B.....202 Paterson Building, Flint
Rulney, Max.....1128½ Chevrolet Ave., Flint
Rundles, Walter Z.....304 First Nat. Bldg., Flint
Rundles, Walter Z., Jr.....304 First Nat. Bldg., Flint
Sandberg, Russell G.....1315 Mott Foundation Bldg., Flint
Sandy, Kenneth R.....2701 Detroit St., Flint
Scavarda, Charles J.....304 First Nat. Bldg., Flint
Schiff, B. A.....323 W. Second St., Flint
Schmidlin, R. W.....3710 Davison Road, Flint
Schreiber, Oskar E.....421 Kresge Building, Flint
Schultz, J. Stanley.....3327 Fleming Road, Flint
Schwartz, J. M.....4300 S. Saginaw St., Flint
Scott, Robert D.....1215 Detroit St., Flint
Searles, Karl F.....2932 Corruna Road, Flint
Seymour, G. D.....Professional Bldg., Clio
Shantz, Leighton O.....1239 Mott Fdtn., Bldg., Flint
Sheeran, Daniel H.....809 Genesee Bank Bldg., Flint
Shipman, Charles W.....325 E. First St., Flint
Simoni, Lewis E.....3210 S. Dort Highway, Flint
Sirna, Anthony R.....Chevorlet Engine & Stamping Plant, Van Slyke Road, Flint
Smith, Eugene C.....814 Mott Fdtn. Bldg., Flint
Smith, H. O.....821 Mott Foundation Bldg., Flint
Smith, Maurice J.....2801 N. Saginaw, Flint
Sniderman, Benjamin F.....727 Beach St., Flint
Snyder, Charles E.....8042 Miller Road, Swartz Creek
Sorkin, Morris L.....718 Beach St., Flint
Sorkin, Samuel S.....718 Beach St., Flint
Sparks, Harvey V.....603 First National Bldg., Flint
Steffe, R. S.....709 Genesee Bank Bldg., Flint
Steinman, Floyd H.....734 Mott Fdtn. Bldg., Flint
Stevens, P. K.....201 Michigan Theatre Bldg., Flint
Stevenson, William W.....416 Kresge Bldg., Flint
Streat, Rudolph W.....218 East 8th St., Flint
Strong, K. H. (M).....110 Young Dr., Lakeview Subdiv., Fairfield, Ill.
Stroup, Clayton K.....2002 E. Court St., Flint
Sutherland, James K.....402 E. Third St., Flint
Sutton, G. D.....303 W. Court St., Flint
Theuerle, W. I.....3101½ N. Saginaw St., Flint
Thompson, Jack W.....2702 Flushing Road, Flint
Thorburn, Grant.....702 Ballenger Hwy., Flint
Tofteland, Elmer H.....302 W. Third Ave., Flint
Tower, Rita B.....702 Ballenger Hwy., Flint
Turner, Merald G.....316 Dryden Building, Flint
Tuuri, Arthur L. (M).....Mott Clinic, Hurley Hosp., Flint
VanHarn, R. S.....5009 N. Saginaw St., Flint
Varney, Howard L.....1415 Broadway, Flint
Vary, Edwin P.....608 First National Bldg., Flint
Vaughan, Edgar J.....Linden
Wade, F. V.....615 Mott Foundation Bldg., Flint
Walcott, Carver G.....201 E. Caroline, Fenton
Ward, Nell M.....1139 Mott Fdtn. Bldg., Flint
Ware, Frank A.....514 Genesee Bank Bldg., Flint 3
Wark, David R.....1315 Detroit, Flint

Weber, R. M.....3710 Davison Road, Flint
Wentworth, John E.....1651 Chevrolet Ave., Flint
Werness, Inga W.....304 First Nat. Bank Bldg., Flint
White, C. H.....106 River St., Fenton
White, Herbert T. (L).....1620 Mason St., Flint
Willard, R. H.....718 Beach St., Flint
Williams, W. S.....G-3398 S. Saginaw St., Grand Blanc
Willoughby, Gordon L.....5009 N. Saginaw St., Flint
Willoughby, Leslie L. (L).....1402 Davison Road, Flint
Wills, Thomas N.....706 W. Court St., Flint
Winchester, Walter H. (L).....515 Genesee Bank Bldg., Flint
Woughter, Harold W.....1312 Mott Fdtn. Bldg., Flint
Wright, Donald R.....403 W. Court St., Flint
Wyatt, W. W.....633 Mott Fdtn. Bldg., Flint
Zeis, M. G.....718 Beach St., Flint

GOGEBIC COUNTY

Albert, S. G.....103 Suffolk St., Ironwood
Davidson, Donald L.....200 S. Sophie St., Bessemer
Eisele, D. C.....2nd Fl., 109 E. Aurora St., Ironwood
Franck, John R., Jr.....401 Sunday Lake, Wakefield
Gertz, M. A.....109 E. Aurora Street, Ironwood
Gingrich, W. A.....2nd Fl., 109 E. Aurora St., Ironwood
Gorilla, A. C.....2nd Fl., 210 S. Suffolk St., Ironwood
Harrington, R. R., Jr.....512 Douglas Blvd., Ironwood
Keskey, T. J.....207 E. Aurora St., Ironwood
Lieberthal, M. J.....104 S. Suffolk, Ironwood
Lieberthal, Paul R.....104 S. Suffolk, Ironwood
McEnroe, J. E.....Newport Hospital, Ironwood
O'Brien, A. J. (L).....216 E. Aurora Street, Ironwood
Pinkerton, H. A.....Newport Hospital, Ironwood
Santini, F. J.....2nd Fl., 109 E. Aurora St., Ironwood
Stevens, Charles E.....216 E. Aurora Street, Ironwood
Tashiro, Kiyo.....Grand View Hospital, Ironwood
Tressel, Henry A.....Wakefield
Wacek, W. H.....Grand View Hospital, Ironwood

GRAND TRAVERSE COUNTY

Beall, J. G.....118½ E. Front,Traverse City
Benjamin,M. B.....Traverse City State Hosp., Traverse City
Bolan, Ellis J.....Suttons Bay
Brownson, K. N.....116 Cass, Traverse City
Brunk, C. F.....Route 1, Traverse City
Bushong, B. B.....116 Cass, Traverse City
Cline, Theodore.....436 W. Front St., Traverse City
Cline, Warren.....436 W. Front St., Traverse City
Dunn, C. W.....State Hospital, Traverse City
Ellis, Claude I.....Suttons Bay
Ferguson, J. T...Traverse City State Hosp., Traverse City
Goodrich, Dwight (R)....601 W. Front St., Traverse City
Haberlein, Charles R.....438 W. Front St., Traverse City
Hall, J. W.....212½ E. Front, Traverse City
Hamilton, E. E.....530 S. Union St., Traverse City
Herkner, Mildred L.....119 Barlow St., Traverse City
Huene, Nevin.....112 E. Front, Traverse City
Huston, Russell R.....Elk Rapids
Jerome, J. T.....217 S. Madison, Traverse City
Kitti, William H.....Kalkaska
Lemen, C. E.....216½ E. Front, Traverse City
Lossman, Robert T.....Munson Hospital, Traverse City
McClay, A. C.....215 S. Madison, Traverse City
Milliken, John G.....224 Circle Drive, Traverse City
Nickels, M. M.....State Hosp., Traverse City
Osterhagen, H. F.....MR 11, Box No. 38, Traverse City
Osterlin, M. F.....Route No. 1, Traverse City
Pike, D. G.....876 E. Front, Traverse City
Power, F. H.....116 Cass, Traverse City
Ramzy, C. O., Jr.....Box C Traverse City State Hosp., Traverse City
Salon, Dayton D.....108½ E. Front St., Traverse City
Scott, J. E.....Frankfort
Sheffer, M. B.....Traverse City State Hospital, Traverse City
Sladek, E. F.....123 E. Front, Traverse City
Stokes, G. E.....State Bank Bldg., Traverse City
Stone, Fordyce H.....Beulah
Swartz, F. G.....301 State Bank Bldg., Traverse City
Sweeney, B. I...227½ Grandview Pkwy., Traverse City
Thacker, Fred R.....Frankfort
Thirlby, E. L. (L).....116 Cass, Traverse City
Thirlby, Richard L.....711 Second St., Traverse City
Trautman, Frederick B.....Frankfort
Van Leuven, B. H. (R).....Empire
Wagener, Creighton.....438 W. Front St., Traverse City
Way, L. R. (R).....436 E. State, Traverse City
Weitz, H. L.....529 Monroe, Traverse City
Wieh, J. E.....118½ E. Front, Traverse City
Wilcox, P. H.....526 W. 10th St., Traverse City
Wiley, P. K.....Elk Rapids
Zielke, I. H.....212 E. Front, Traverse City
Zimmerman, J. G.....306 State Bank Bldg., Traverse City

GRATIOT-ISABELLA-CLARE COUNTIES

Aldrich, Alfred L.....Ithaca
Barstow, D. K.....215 W. Saginaw St., St. Louis
Becker, M. G.....Edmore
Bedo, A. V.....314 S. Brown St., Mt. Pleasant
Bergin, J. H.....112½ Superior St.,Alma
Bick, A. Vernon.....608 E. Chippewa, Mt. Pleasant
Budge, M. J.....1035 Jefferson, Ithaca
Burch, L. J. (E).....314 E. Broadway, Mt. Pleasant
Burt, C. E.....110 S. Pine River, Ithaca
Burt, Loren G.....Alma
Chamberlain, R. W.....608 E. Chippewa, Mt. Pleasant
Chamichian, Soren.....1026 S. Drive., Mt. Pleasant
Davis, L. L.....314 S. Brown St., Mt. Pleasant
Drake, Wilkie M. (E).....Breckenridge
DuBois, C. F.....706 State St., Alma
Graham, B. J.....119½ S. Superior St., Alma
Hall, R. F.....805 Douglas St., Mt. Pleasant
Hamilton, E. D.....610 S. College, Mt. Pleasant
Hammerberg, Kuno.....622 McEwan, Clare
Harrigan, W. L.....408 E. Broadway, Mt. Pleasant
Hedges, Frank W.....General Delivery, Edmore
Hersee, W. E.....306 S. College, Mt. Pleasant
Hobbs, A. D.....120 W. Center Street, St. Louis
Hoogerland, C. L.....303 W. Superior, Alma
Hyslop, L. F.....205 S. College, Mt. Pleasant
Johnson, P. R.....206 S. College Ave., Mt. Pleasant
Juhnke, L. W.....314 S. Brown St., Mt. Pleasant
Kilborn, H. F.....Ithaca
McArthur, S. C.....Rosebush
Oldham, E. S.....Breckenridge
Palmer, F. W.....P. O. Box 32, Mt. Pleasant
Putzig, L. W.....Blanchard
Ringer, P. H.....314 S. Brown St., Mt. Pleasant
Rottschafer, J. L.....715 Center St., Alma
Silvert, Pasche P.....Vestaberg
Strange, R. H.....117 S. College, Mt. Pleasant
VonLackum, Leroy.....445 Howard, Alma
Waggoner, R. L.....120 W. Center St., St. Louis
Wallman, C. H.....901 State St., Alma
Wickert, L. R.....314 S. Brown St., Mt. Pleasant
Wilcox, R. A.....525 State St., Alma
Wilson, Earl C.....Harrison
Wolfe, K. P.....427 W. Superior, Alma
Wood, C. B.....R.F.D. No. 2, Mt. Pleasant
Wood, J. M.....314 S. Brown St., Mt. Pleasant

HILLSDALE COUNTY

Bates, M. P.....108 S. Manning, Hillsdale
Davis, L. A.....Camden
Davis, W. B. (M).....Murphy Army Hospital, Waltham, Massachusetts
Day, Luther W.....112 E. Chicago Street, Jonesville
Hanke, George R. (L).....R.F.D., Osseo
Hodge, C. L.....Reading
Hughes, Henry F. (L).....Hillsdale
MacNeal, John A.....76 N. Manning Street, Hillsdale
Martindale, E. A. (L).....Hillsdale
Mattson, H. F.....32 S. Broad Street, Hillsdale
McFarland, O. G. (L).....North Adams
Miller, Harry C. (L).....4760 Panorama Drive, San Diego 3, Calif.
Peterson, C. A.....32 Broad Street, Hillsdale
Sawyer, W. W.....61 N. Howell St., Hillsdale
Stein, Arthur J.....144 Budlong Street, Hillsdale
Strom, Arthur W.....32 S. Broad Street, Hillsdale
Trapp, Donald G.....32 S. Broad Street, Hillsdale
Wiggins, Ira W.....230 E. Chicago St., Jonesville

HOUGHTON COUNTY

Aldrich, A. B.....503 Sheldon Avenue, Houghton
Aldrich, L. C.....1609 E. Houghton Ave., Houghton
Bourland, P. D. (L)....134½ Calumet Avenue, Calumet
Bourland, P. E. M., Lt. Col., M.C. (M).....Med. Sec. Hqs., USARAL, APO 949, Seattle, Washington
Brewington, G. F. (E).....1805 Walnut Avenue, Las Vegas, Nevada
Burke, John J.....10 Duncan Avenue, Hubbell
Gregg, W. T. S. (E).....Eagle Harbor
Hillmer, Raymond E.....1 Algomah, Painesdale
Hosking, F. S.....328 Florida Street, Laurium
Janis, Anton J.....East Hancock, Hancock
King, Sidney.....St. Joseph Hospital, Hancock
King, William T. (E).....Ahmeek
Kirton, Job R. W. (E).....106 Sixth Street, Calumet
Kolb, F. E.....128 Calumet, Calumet
LaBine, Alfred.....1019 College Avenue, Houghton
Larson, Forrest W.....1400 E. Houghton, Houghton
Lepisto, V. E.....414 Hecla Street, Laurium
Levin, Simon (E).....1209 College Avenue, Houghton
Lund, C. A. E.....1205 Calumet Street, Lake Linden
Murphy, P. J.....130 Calumet, Calumet
Potter, E. C.....Baraga County Hospital, L'Anse
Repola, Kenneth L.....338 Iroquois St., Laurium
Roberts, Melvin D. (L).....404 Hancock, Hancock
Roche, Andrew M.....240 Pewabic St., Laurium
Schochet, S. S.....P.O. Box 4614, Fondren Station Jackson, Mississippi
Sloan, P. S.....214 Clark Street, Houghton
Smith, Charles R.....E. White Street, Hancock
Stroube, J. A.....Baraga County Hosp., L'Anse
Wickliffe, C. D.....Sixth Street, Calumet
Wickliffe, J. T. P.....1167 Calumet Avenue, Calumet
Winkler, Henry J.....L'Anse

HURON COUNTY

Bash, T.L.....Kinde
Dixon, Ralph C.....Pigeon
Elliott, C. S.....Pigeon
Gettel, Roy R.....Bad Axe
Herrington, Charles I.....Bad Axe
Herrington, Willet J.....Bad Axe
Oakes, C. W., Jr.....Harbor Beach
Ritsema, John.....Sebewaing
Scheurer, Clare A.....Pigeon
Sorensen, M. G.....P.O. Box, Elkton
Steinhardt, Edward E.....Bad Axe
Thompson, J. E.....Caseville
Turner, Phillip R.....Harbor Beach
Wible, Charles F.....Sebewaing

INGHAM COUNTY

Agate, George.....Mich. Dept. of Health, Lansing
Alexander, Reuben G.....301 Seymour, Lansing
Altland, J. K.....Michigan Dept. of Health, Lansing
Anderson, Norbert (A)....St. Lawrence Hospital, Lansing
Asselin, David C.....503 Amer. State Bank Bldg., Lansing
Badgley, W. O.....624 N. Capitol Avenue, Lansing
Baker, T. C.....P.O. Box 756, Lansing
Bates, Richard (M)....1820 E. Michigan Ave., Lansing
Bauer, Theodore I.....808 Michigan Nat'l Tower, Lansing
Behen, William C.....535 S. Capitol, Lansing
Behney, C. A.....Michigan Dept. of Health, Lansing
Bellinger, E. G. (L).....114 W. Lenawee, Lansing
Berden, Eleanor Alice (A)....Edward W. Sparrow Hosp., Lansing
Berens, B. M.....110 N. Rosemary, Lansing
Bevez, Frank L. (M).....Med. Co., 87th Reg., APO 162, c/o PM, New York, New York
Bingham, B. W.....1820 E. Michigan Ave., Lansing
Black, Charles E.....529 W. Grand River, Williamston
Black, Gertrude C.....529 W. Grand River Ave., Williamston
Bowersox, R. J. (M).....3444 U. S. Army Hosp., Camp Stewart, Georgia
Bradford, C. W.....419 S. Walnut, Lansing
Breakey, Robert S.....1211 Bank of Lansing Bldg., Lansing
Brown, Fred W., Jr.....536 Tussing Bldg., Lansing
Brubaker, Earl W.....1406 Bank of Lansing Bldg., Lansing
Brucker, Karl B. (R)....610 S. Walnut Street, Lansing
Bruni, J. R.....1023 E. Michigan Ave., Lansing
Burhans, J. B. (A).....115 S. LaGrave, Paw Paw
Burhans, R. A.....803 Michigan Nat'l Tower, Lansing
Cairns, D. A.....136 W. Ash Street, Mason
Calomeni, Anthony D.....309 Seymour, Lansing
Carlson, R. G.....3526 W. Saginaw St., Lansing
Carr, Earl I.....300 W. Ottawa, Lansing
Casey, B. L.....M. S. U. Health Center, East Lansing
Chaskes, Marion Iddings..226 S. Capitol Avenue, Lansing
Cheney, W. D.....Dept. of Radiology, E. W. Sparrow Hosp., Lansing
Christian, L. G.....108 E. St. Joseph, Lansing
Clark, W. E.....136 W. Ash St., Mason
Clinton, George R.....136 W. Ash Street, Mason
Combs, R. G.....300 W. Ottawa, Lansing
Comstock, H. C.....1031 E. Michigan Ave., Lansing
Cook, R. J.....105 S. Jenison Ave., Lansing
Coopwood, W. E. (A).....Edward W. Sparrow Hosp., Lansing
Cope, H. E.....Michigan Dept. of Health, Lansing
Cordes, J. F.....512 Michigan Nat'l Tower, Lansing
Corneliuson, Goldie B.....Michigan Dept. of Health, Lansing
Cowan, J. A.....825 Touraine, East Lansing
Crisostomo, Flor de Liza (A).....Edward W. Sparrow Hosp., Lansing
Crisostomo, Santiago (A).....E. W. Sparrow Hosp., Lansing
Cummings, G. D.....Mich. Dept. of Health, Lansing
Darling, L. H.....115 W. Hillsdale, Lansing

Dart, Dorothy....Box A, Ypsilanti State Hosp., Ypsilanti
Dawe, C. D.....521 N. Capitol Ave., Lansing
Dean, Carleton.....252 Hollister Bldg., Lansing
De Kleine, William.....301 Seymour St., Lansing
DeVries, C. L. F.....320 Townsend, Lansing
Dexter, Mary J.....129 E. Maple, Mason
Doyle, C. P. (E)....1408 Bank of Lansing Bldg., Lansing
Drolett, Donald J.....609 N. Washington Ave., Lansing
Drolett, Fred J.....900 Prudden Bldg., Lansing
Drolett, L. A.....3526 W. Saginaw, Lansing
Dunn, F. M.....301 Seymour, Lansing

Eggers, E. M. (A)....Edward W. Sparrow Hosp., Lansing
Ellis, Bertha W. (R).....P.O. Box 2327, Hollywood, Fla.
Ellis, C. W. (L).....P.O. Box 2327, Hollywood, Fla.
Eze, C. W. (A).....E. W. Sparrow Hosp., Lansing

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Feurig, J. S.....MSU Health Center, East Lansing
Finch, Russell L.....420 S. Walnut Street, Lansing
Folkers, Leonard M.....234 Michigan Avenue, East Lansing
Forrest, C. G. (A).....E. W. Sparrow Hosp., Lansing
Fortino, S. P.....203 Bauch Bldg., Lansing
Fosget, Wilbur W.....210 E. Hillsdale St., Lansing
Foust, Earl H. (L).....P.O. Box 422, Eustis, Florida
Frank, William.....4341 W. Delhi St., Holt
French, Horace L.....301 Seymour, Lansing
Fryer, Douglas H.....Michigan Dept. of Health, Lansing

Gardner, Carl A. (A).....2105 Tuomy Road, Ann Arbor
Gardner, C. B.....320 Townsend Street, Lansing
Garlinghouse, A. John.....408 N. Capitol Ave., Lansing
George, H. C.....335 Seymour Street, Lansing
Gilmartin, Richard (A)....E. W. Sparrow Hosp., Lansing
Goldner, Roy E.....1318½ S. Washington, Lansing
Govons, S. R.....408 N. Capitol Ave., Lansing
Hardy, A. T. (A).....E. W. Sparrow Hosp., Lansing
Harebottle, N. H. (A)....E. W. Sparrow Hosp., Lansing
Harris, Herbert W.....609 N. Washington, Lansing
Harrison, W. H.....834 W. St. Joseph, Lansing
Harrold, J. F.....326 W. Ionia St., Lansing
Hart, L. C.....119 W. Lenawee, Lansing
Hautau, Emily R.....308 Highland Avenue....East Lansing
Hayes, R. E.....1101½S. Washington Avenue, Lansing
Hayford, William D.....609 N. Washington Ave., Lansing
Heald, Gordon H...1107 Bank of Lansing Bldg., Lansing
Heckert, Frank B...1105 Bank of Lansing Bldg., Lansing
Heckert, J. K.....1105 Bank of Lansing Bldg., Lansing
Heerdt, Mark E.....Grand River & Grandview, Okemos
Henderson, N. D.....826 Sunset Lane, East Lansing
Henry, L. L.....326 Townsend, Lansing
Henry, R. A.....1515 W. Mt. Hope Ave., Lansing
Hermes, E. J.....310 Townsend, Lansing
Heustis, Albert E.....Michigan Dept. of Health, Dewitt Road, Lansing
Himmelberger, R. J.....320 Townsend, Lansing
Hofstra, Raymond (M).....Michigan Dept. of Health, Lansing
Hogg, R. E.....1964 S. Cedar St., Holt
Holland, Charles F.....624 N. Capitol Ave., Lansing
Holt, S. H. (A).....Henry Ford Hospital, Detroit
Huggett, Clare C.....126 W. Grand River, Lansing
Hurth, M. S.....1717 Jerome St., Lansing
Isbister, J. L. (M)....Michigan Dept. of Health, Lansing
Jacob, S. Sprigg.....201 Ann Street, East Lansing
Johnson, D. B.....320 Townsend Street, Lansing
Johnson, Henry T. Jr...1439 E. Michigan Ave., Lansing
Johnson, Kenneth H.....1116 Olds Tower, Lansing
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Kent, Herbert K.....311 S. Pine, Lansing
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Anderson, Donald H.....Kent Street, Portland
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Birzgalis, Alfreds.....Ionia State Hospital, Ionia
Bracey, L. E. (L).....Sheridan
Buck, Jack H.....Ionia
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Bunce, Leo W.....Trufant
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Fleming, J. W. C.....Pewamo
Foust, Joseph C.....Ionia
Fox, Harold M.....Portland
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Lilly, Isaac S. (L).....Stanton
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Marston, L. L.....Lakeview
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Tannheimer, J. F.....Ionia
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Beckwith, Sidney A.....Stockbridge
Bentley, J. P.....404 McNeal Street, Jackson
Bentley, Mary N.....404 McNeal Street, Jackson
Brashares, Z. A.....Brooklyn
Bullen, G. Rex.....418 Third, Jackson
Clarke, Corwin S.....605 Dwight Bldg., Jackson
Cochrane, Wayne A. (L)....409 McBride Street, Jackson
Cooley, Charles W.....Mercy Hospital, Jackson
Cooley, Randall M.....141 East Robinson, Jackson
Corley, Cecil.....204 Homecrest Road, Jackson
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Corley, Robert W.....204 Homecrest Road, Jackson
Cox, Ferdinand (L).....1601 Fourth Street, Jackson
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DeMay, Cuthbert E.....403 E. Michigan, Jackson
DeMay, John D.....403 E. Michigan, Jackson
Deming, Richard C.....517 Wildwood, Jackson
Dengler, Charles R.....504 Third Street, Jackson
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Hardie, George C.....290 W. Michigan, Jackson
Hicks, Glenn C. (L).....615 Dwight Bldg., Jackson
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Holstein, Arthur P. (A)....214 Ann Arbor St., Manchester
Hunt, Maurice E.....2534 Francis Street, Jackson
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Kiessling, Arnold.....434 Wildwood Ave., Jackson
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McLaughlin, J. M.....710 S. Brown Street, Jackson
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Zwemer, R. J.....1810 Wealthy S.E., Grand Rapids

LAPEER COUNTY

Ausum, J. D.....Imlay City
Bishop, G. Clare.....Almont
Boruch, Leon R. (M).....Drawer "A", Lapeer
Buchanan, Thomas.....Imlay City
Burley, David H. (E).....Almont
Chapin, Clarence D. (L).....Columbiaville
Conaway, Charles E.....Lapeer
Dorland, C. D.....Lincoln Street, Lapeer
Doty, James R.....315 Clay Street, Lapeer
Greaver, Cornell.....North Branch
Heitsch, Wm. C.....Lapeer
Lebedovych, Emil.....Drawer "A", Lapeer
Lebedovych, K. L.....Drawer "A", Lapeer
Leith, Dorothy L.....Imlay City
McBride, John R.....915 Liberty St., Lapeer
Merz, Henry G. (E).....Lapeer
O'Brien, Daniel J.....Nepessing St., Lapeer
Rehn, Adolph T.....Medical Superintendent, Lapeer State Home, Lapeer
Smith, Ellen B.....Lapeer State Home & Trg. School Lapeer
Smith, Glen L.....131 E. Third St., Imlay City
Thomas, J. Orville (E).....North Branch
Zemmer, Harry B.....Clay St., Lapeer
Zolliker, C. R.....P.O. Drawer A, Lapeer

LENAWEE COUNTY

Benz, Carl A.....308 N. Broad St., Adrian
Berghuis, J. W. (A).....347 Budlong St., Adrian
Blanchard, L. E.....301½ W. Main St., Hudson
Blanden, Merwin R.....416 E. Pott St., Tecumseh
Claxton, W. T.....136 Chicago St., Britton
Cook, C. L.....135 W. Chicago, Tecumseh
Dustin, Richard E.....103 W. Brown St., Tecumseh
Eddy, H. R. C.....Adrian Professional Bldg., Adrian
Fitzsimmons, F. J.....128 E. Butler St., Adrian
Hamilton, J. D.....Adrian Professional Bldg., Adrian
Hammel, Richard T.....401 E. Chicago St., Tecumseh
Hanna, R. J.....119 W. Church St., Adrian
Harrison, Robert E.....418 W. Adrian St., Blissfield
Heffron, Charles.....909 E. Butler, Adrian
Heffron, Harold 231 N. Main St., Adrian
Heffron, Howard H.....231 N. Main St., Adrian
Helzerman, Ralph F.....112 S. Ottawa St., Tecumseh
Hewes, William H.....146 E. Maumee St., Adrian
Hinshaw, Warren V.....139½ N. Main St., Adrian
Hunter, T. B.....201 National Bank Bldg., Adrian
Isley, Homer E.....115 W. Adrian St., Blissfield
Loveland, H. H. (E).....515 S. Second Ave., Escanaba
Marsh, R. G. B.....610 W. Logan St., Tecumseh
Mast, W. H. (R).....106 N. Democrat St., Tecumseh
Miller, Perry L.....310 E. Maumee, Adrian
O'Connor, A. R.....122 Locust St., Clinton
Parker, D. A.....454 S. Main St., Adrian
Pasternacki, A. S.....206 E. Front St., Adrian
Patmos, Bernard.....127½ E. Maumee St., Adrian
Phelan, Alvin J.....102 S. Pearl St., Tecumseh
Raabe, E. C.....124 North St., Morenci
Rawson, A. P.....African Medical Missionary
Rogers, John D.....146 Toledo St., Adrian
Sarapo, D. F.....Adrian
Sayre, P. P.....121 N. Main St., Onsted
Stark, Emily S.....108 Clinton, Adrian
Stewart, L. G.....Savings Bank Bldg., Marquette
Thompson, J. R., Jr.....114 Nat'l Bank Bldg., Adrian
Tubbs, R. V.....120 E. Adrian St., Blissfield
VanDusen, Chad A.....R.F.D. #2, Blissfield
Whitehouse, Keith H.....240 W. Main St., Morenci
Wilson, George C.....108 N. Jackson St., Clinton
Wynn, G. H.....310 N. Broad St., Adrian

LIVINGSTON COUNTY

Barton, T. A.....116 N. Michigan Ave., Howell
Clarke, Niles A.....723 Spencer Road, Brighton
Cookinham, F. T.....Howell
Duffy, Ray M.....250 E. Main, Pinckney
Fidler, Wm. F.....Michigan State Sanatorium, Howell
Glenn, Bernard H.....Fowlerville
Hauer, R. Fred.....Fowlerville
Hendren, I. J.....Fowlerville
Hill, H. C.....116 N. Michigan, Howell
Johnson, E. A.....Howell
May, Lewis E.....203 N. Court St., Howell
McGregor, A. J.....300 E. Grand River, Brighton
Nicholas, Mildred V.....Michigan Sanatorium, Howell
Perry, Florence J. C.....17640 San Rosa, Route 3, Birmingham
Polack, R. T.....416 S. Michigan Ave., Howell
Rogers, R. P.....Brighton
Schenden, A. J.....6335 W. M36, Pinckney
Sigler, Hollis L.....110 N. Michigan, Howell
Walker, Enos G.. 4485 Cordley Lake Road, Lakeland
Woodworth, E. S.....422 E. Lake, Howell

LUCE COUNTY

Adams, D. C.....Newberry
Banach, Alexius....Newberry State Hospital, Newberry
Campbell, Earl H. (E).....Newberry
Gibson, R. E.....207 W. John St., Newberry
Grennan, L. E.....210 W. John St., Newberry
Hicks, R. P.....210 W. John St., Newberry
Purmort, William R., Jr.....Newberry
Surrell, M. A.....210 W. John St., Newberry
Swanson, George F.....VA Hospital, University & Woodland Ave., Philadelphia, Penna.
Thompson, T. W.....Newberry State Hospital, Newberry

MACOMB COUNTY

Adler, Morton W.....19188 Appoline Ave., Detroit
Ambrose, R. H.....22401 Eleven Mile Rd. St. Clair Shores
Barker, John G.....8050 Warren Blvd., Centerline
Bower, A. B.....Armada
Brady, Milo J.....21509 Eleven Mile Road, St. Clair Shores
Bryce, I. W.....25219 Eleven Mile Road, St. Clair Shores
Buckley, Daniel J.....160 S. Walnut, Mt. Clemens
Charbeneau, H. P.....Monitor-Leader Bldg., Mt. Clemens
Cherup, Nicholas.....22728 Ryan Road, Van Dyke
Croman, Joseph M.. Jr.....117 Cass Ave., Mt. Clemens
Curatolo, Victor.....67 Cass Ave., Mt. Clemens
Curlett, James E. (L).....26765 Gratiot, Roseville
Deal, Harold R.....11584 Somerset, Detroit
Dudzinski, E. J.....51034 Washington St., New Baltimore
Ekelman, S. B.....130 Cass Ave., Mt. Clemens
Ellias, Elmer P.....18005 Fairfield, Detroit 21
Engles, J. A.....69311 N. Main St., Richmond
Goldman, B. I. ...406 Monitor Leader Bldg., Mt. Clemens
Hartmann, W. B.....1416 S. Gratiot, Mt. Clemens
Heine, Austin W.....99 S. Gratiot, Mt. Clemens
Isbey, Edward K.....25020 Van Dyke, Centerline
Ivkovich, Peter.....12501 East 23 Mile Road, Utica
Jacobs, Manuel.....23700 Van Dyke, Van Dyke
Jewell, James H.....18215 Utica Road, Roseville
Juliar, Joseph F.....302 Monitor-Leader Bldg., Mt. Clemens
Kane, John P.....67 Cass Ave., Mt. Clemens
Kane, Peter V...711 Monitor-Leader Bldg., Mt. Clemens
Kane, W. J.....401 Monitor-Leader Bldg., Mt. Clemens
Klein, A. A.....23700 Van Dyke, Van Dyke
Lee, Frank (M)..8701 W. Nine Mile Road, Oak Park, 37
Maguire, A. J.....45569 Van Dyke, Utica
Martin, Wm. L.....117½ S. Main St., Romeo
Mattes, Max W.....18600 Griggs, Detroit 21
Miller, Sydney S.....22048 Gratiot Ave., East Detroit
Moore, George F.....410 Monitor-Leader Bldg., Mt. Clemens
Mulligan, Philip T.....91 Cass Ave., Mt. Clemens
Niekamp, H. H.....45157 Van Dyke, Utica
Pollina, C. J.....21503 Harper, St. Clair Shores
Reichman, Joseph J.....67 Cass Ave., Mt. Clemens
Reitzel, Rufus H.....199 S. Gratiot, Mt. Clemens
Reizen, Maurice S.....10564 Ludlow, Huntington Woods
Revere, J. O.....192 S. Gratiot, Mt. Clemens
Rickman, L. D.....10 Howard St., Mt. Clemens
Rinkenberger, E. A.....67 Cass Ave., Mt. Clemens
Rivard, Charles L...20825 Mack Ave., Grosse Pte. Woods
Rivkin, Joseph.....44 S. Gratiot, Mt. Clemens
Rizzo, Albert.....21503 Harper Ave., St. Clair Shores
Roth, George E.....19136 Mendota Ave., Detroit
Rothman, Arthur M.....22552 Gratiot, East Detroit
Rourke, Ronald E...21503 Harper Ave., St. Clair Shores
Rousseau, D. L.....67 Cass Ave., Mt. Clemens
Ruedisueli, Clarence A.....18215 Utica Road, Roseville
Salot, Russell F...713 Monitor-Leader Bldg., Mt. Clemens
Scher, Joseph N.....130 Cass Ave., Mt. Clemens
Scher, Sydney.....132 Cass Ave., Mt. Clemens
Siegfried, E. G.....91 Cass Ave., Mt. Clemens
Sims, W. N.....26580 Grandmont, Roseville
Singer, Nelson.....22100 Gratiot, East Detroit
Smith, Milton C.....50 S. Gratiot, Mt. Clemens
Steinberger, Eugene.....22700 Van Dyke, Van Dyke
Stone, Elizabeth A.....Romeo
Strempek, W. F.....209 W. St. Clair St., Romeo
Stryker, Oscar D.....Macomb Co. Health Dept., Mt. Clemens
Sturm, Fred A.....29405 E. Jefferson, St. Clair Shores
Suksta, A. W.....18215 Utica Rd., Roseville
Test, Frederick C., II.....310 E. Jefferson, Detroit 31
Thompson, Alfred A.....126 Cass Ave., Mt. Clemens
Ullrich, Russell W.....91 Cass Ave., Mt. Clemens
Weiss, Jack I.....13301 Ludlow, Huntington Woods
Wellard, Henry C.....New Baltimore
Whitley, Alec.....30233 Jefferson, St. Clair Shores
Wilde, M. M.....32171 Mound Road, Warren
Wiley, D. Bruce.....45310 Van Dyke, Utica
Wyte, William C.....99 S. Gratiot Ave., Mt. Clemens
Zavela, Daniel.....22644 Gratiot Ave., East Detroit

MANISTEE COUNTY

Garneau, R. R.....Mercy Community Hosp., Manistee
Hansen, Earnest C.....78 Maple, Manistee
Konopa, John F.....57 Poplar St., Manistee
Lalime, Ruth E.....12395 Lynn, Bear Lake
Lewis, Lee A. (E).....467 Second St., Manistee
Loughrin, J. J.....90 Maple St., Manistee
Miller, Ernest B.....425 River St., Mansitee
Oakes, Ellery A.....401 River St., Manistee
Ramsdell, Homer A.....Engelman Bldg., Manistee
Schwarz, Marlowe L.....Box 188, Onekama
Schwing, D. N.....326 First St., Manistee

MARQUETTE-ALGER COUNTIES

Acocks, J. R.....Morgan Heights San., Marquette
Amolsch, Arthur L.....321 Pine St., Marquette
Armstrong, W. E. (M).....921 Pine St., Marquette
Baron, Benzoin C.....Munising
Bennett, Arthur K. (L).....Box 436, Mt. Dora, Florida
Bennett, M. C.....Union National Bank Bldg., Marquette
Berry, Robert F.....Bacon Bldg., Marquette
Bertucci, Joseph P.....114 S. First St., Ishpeming
Bolitho, T. B.....425 E. Michigan Ave., Marquette
Casler, W. L.....131 E. Ridge, Marquette
Cooperstock, Moses.....105 S. Front St., Marquette
Corcoran, W. A.....200 S. Main St., Ishpeming
D'Adesky, R. G. (A).....St. Luke's Hospital, Marquette
Drury, Charles P.....414 E. Hewitt, Marquette
Elzinga, Eugene R.....315 N. Front St., Marquette
Erickson, Arvid W.....114 Front St., Ishpeming
Fennig, F. A.....315 N. Front St., Marquette
Harkin, John C.....207 Savings Bank Bldg., Marquette
Hettle, P. J.....Savings Bank Bldg., Marquette
Hirwas, C. L.....Huetter Bldg., Marquette
Hornbogen, D. P.....Hornbogen Bldg., Marquette
Howe, Lloyd W.....Savings Bank Bldg., Marquette
Jaedecke, R. G.....829 Croix St., Negaunee
Johnson, R. R.....W. Washington St., Marquette
Kane, Elizabeth.....418 W. Magnetic, Marquette
Knutson, George O.....829 Croix St., Negaunee
Koenig, Harry.....Savings Bank Bldg., Marquette
Kronschnabel, E. F.....Gwinn
Lambert, W. C.....Huetter Bldg., Marquette
LeGolvan, Celestin....221 W. Washington St. Marquette
LeGolvan, Paul C. (M).....USN Medical Research Unit 3, APO 231, Box E, c/o PM, NYC.
Lyons, James W., Jr.....First National Bldg., Marquette
Matthews, Norman L.....St. Luke's Hospital, Marquette
Moore, B. E.....524 Mather St., Ishpeming
Mudge, William A.....108 Ridge St., Negaunee
Narotzky, Archie S.....200 S. Main St., Ishpeming
Paine, R. L.....416 Teal Lake, Negaunee
Rosenbaum, Louis, II.....524 Mather, Ishpeming
Schweinsberg, Sara D. (A).....6501 Haverford, Philadelphia, Pa.
Sicotte, Isaiah (L).....Michigamme
Swinton, A. L. (E).....Savings Bank Bldg., Marquette
Tearnan, Raymond A.....Munising
Van Riper, Paul (L).....Champion
Waldie, George M.....427 N. Eighth Ave., St. Petersburg, Fla.
Wickstrom, George B.....Madigan Bldg., Munising
Williams, R. G.....524 Mather St., Ishpeming
Wright, K. C.....3156 Lakeshore Blvd., Marquette

MASON COUNTY

Bacon, Herbert G., Jr.....Scottville
Boldyreff, Ephraim B.....Custer
Boon, A. F.....102½ W. Ludington, Ludington
Carney, John R.....202 N. Park, Ludington
Carney, Ruth V. C.....202 N. Park, Ludington
Goulet, Leo J.....222 S. James St., Ludington
Hoffman, H. B.....604 E. Ludington, Ludington
Kleinschmidt, Gladys.....Court House Bldg., Ludington
Martin, William S.....107 W. Ludington Ave., Ludington
Morrow, W. J. (M).....Sts. "E.E.", Quonset Point, R. I.
Ostrander, Robert A.....121 Ludington Ave., Ludington
Paukstis, Charles A.....111 E. Court St., Ludington
Slaybaugh, James C.....101 W. Loomis St., Ludington

MECOSTA COUNTY

Bruggema, Jacob Evart
Chess, Leo F.....232 Chestnut St., Reed City
Franklin, Benjamin L. (E).....Remus
Haldeman, Jack.....228 S. Warren, Big Rapids
Hickox, L. A.....211 Rose St., Big Rapids
Ivkovich, Paul.....111 S. Chestnut St., Reed City
Kilmer, David N.....102½ Upton, Reed City
Kilmer, Paul B.....102½ Upton, Reed City
Kowaleski, Edward H.....Remus
Merlo, Frank A.....206 S. Michigan Ave., Big Rapids
Nelson, Lorenzo R.....Baldwin
Peck, Louis K. (E).....Barryton
Rood, R. C.....282 N. Cass St., Morley
Treynor, Thomas P.....126 Maple St., Big Rapids
Tyson, J. L.....324 Mecosta Ave., Big Rapids
Van Auken, E. W.....229 S. Warren, Big Rapids
Walters, J. E.....624 S. Michigan Ave., Big Rapids
White, John A.....121 S. Michigan Ave., Big Rapids

MENOMINEE COUNTY

Agneberg, Nils O.....531 First St., Menominee
Brukardt, Herman R.....534 First St., Menominee
Clay, J. W.....1146 Tenth Ave., Menominee
DeWane, Francis J.....413 Tenth Ave., Menominee
Flanagan, Clarence B.....623 First St., Menominee
Glickman, L. Grant.....958 First St., Menominee
Gonty, Arthur.....St. Joseph's-Lloyd Hosp., Menominee
Heidenreich, John R.....Daggett
Hopson, G. H.....Electric Square Bldg., Menominee
Hopson, Patricia C.....Electric Square Bldg., Menominee
Jones, William S.....1146 10th Ave., Menominee
Jones, W. S., Jr.....1146 10th Ave., Menominee
Kerwell, Karm C.....Stephenson
Olson, R. C.....Electric Square Bldg., Menominee
Sethney, Henry T. (L).....Electric Square Bldg., Menominee
Towey, John W.....Pinecrest San., Powers

MIDLAND COUNTY

Ballmer, Robert S.....2715 Ashman St., Midland
Bernier, J. A.....Sanford
Blackhurst, R. T.....Arcade Bldg., Midland
Bowsher, Robert E.....2719 Ashman St., Midland
Bridge, R. G.....2715 Ashman, Midland
Bulmer, Dan J.....402 E. Ellsworth, Midland
Buskirk, M. D.....110 W. Sugnet, Midland
Devlin, James.....224 E. Larkin, Midland
Fox, N. A., Jr. (A)....Midland General Hosp., Midland
Gay, Harold H.....Dow Chemical Co., Midland
Gordon, Harold L.....1423 Clover Lane, Midland
Grewe, Norman C.....347½ E. Main St., Midland
Gronemeyer, William H.....110 W. Sugnet, Midland
Haberstroh, Colleen.....907 Eastman, Midland
Holder, Benjamin.....Dow Medical Dept., Midland
Howe, I. M.....110 W. Sugnet, Midland
Howell, R. H.....124 Townsend St., Midland
Ittner, Martin J.....217 N. Saginaw Rd., Midland
Kaasa, Laurin J.....2011 Ashman St., Midland
Linsenmann, Karl W.....312 E. Main St., Midland
MacCallum, C. L.....Box 222, Midland
Maynard, W. A.....Coleman
Meisel, Edward H., Jr.....413 Lingle Lane, Midland
Moench, Fred.....401 W. Main St., Midland
Murphy, John E.....119 Gordon St., Midland
O'Hora, Bernard.....110 W. Sugnet, Midland
Pike, Melvin H.....224 E. Larkin St., Midland
Poznak, Leonard A.....1411 Crane Court, Midland
Randolph, Stephen H.....117 Gordon St., Midland
Towsley, W. D.....Arcade Bldg., Midland
Willison, Charles H.....122 Townsend, Midland

MONROE COUNTY

Ames, Florence D.....2 W. Noble Ave., Monroe
Barrett, C. D.....218 E. First St., Monroe
Blakey, L. C.....222 N. Monroe St., Monroe
Bond, W. W.....4 East Front St., Monroe
Cigany, Zoltan B.....1402 Monroe, Carleton
Diehl, Joy O. Stephenson.....130 Maple Blvd., Monroe
Douglas, D. W.....17 E. First St., Monroe
Ewing, R. T.....130 Maple Blvd., Monroe
Flanders, J. P.....31 Washington, Monroe
Frary, R. A.....423 E. Elm Ave., Monroe
Freud, John W.....222 N. Monroe, Monroe
Hensel, Hilda M. E.....12 East Fourth, Monroe
Hnatchuk, Nicholas.....Petersburg
Hunter, M. A.....35 East Front St., Monroe
Johnson, A. Esther.....31 Washington Ave., Monroe
Kelso, S. Newton, Jr.....127 E. Front St., Monroe
Laboe, Edward W.....725 N. Monroe, Monroe
Lammers, Gerald P.....Ida
Loan, S. B.....31 Washington St., Monroe
Long, Edgar C.....1310 N. Macomb St., Monroe
McDonald, T. A.....17 E. Elm Ave., Monroe
McGeoch, R. W.....718 N. Macomb, Monroe
McMillin, J. H.....423 E. Elm St., Monroe
Meier, Walter A.....106 E. Front St., Monroe
Middleton, S. W.....219 W. Front St., Monroe
Newcomer, S. R.....AT & SF Hospital, Topeka, Kans.
Parmelee, O. E. (L).....Lambertville
Pinkus, Hermann K. B.....12 E. Fourth St., Monroe
Reisig, Albert H.....9 S. Monroe St., Monroe
Sanger, Emerson J. J.....530 S. Monroe St., Monroe
Sisman, B. J.....325 N. Monroe St., Monroe
Streicher, R. G.....729 N. Monroe St., Monroe
Tomlinson, Ledyard H.....Newport
Wagar, Spencer H.....31 Washington St., Monroe
Weeks, V. L.....1 E. Front St., Monroe
Wilkins, Rolland.....105 E. Front St., Monroe
Williams, Robert J.....31 Washington St., Monroe
Williamson, George W.....284 Tecumseh St., Dundee

MUSKEGON COUNTY

Allen, R. T.....1891 Lake Shore Dr., Muskegon
Anderson, A. J.....1371 Peck St., Muskegon
Anderson, Axel.....Lakewood Club, Twin Lake
Atkinson, Annie L.....1019 Green Creek Road, Route #2, Muskegon
August, R. V.....72 E. Broadway, Muskegon Heights
Barnard, Helen S.....Nedeau Bldg., Muskegon
Barnes, J. W.....102 Professional Bldg., Montague
Benedict, Arthur L.....22 W. Southern Ave., Muskegon
Bloom, R. E.....419 Lyman Bldg., Muskegon
Bolthouse, Robert E.....2416 Peck St., Muskegon Heights
Bond, W. H.....1377 Peck St., Muskegon
Boyd, D. R.....1735 Peck St., Muskegon
Bradshaw, Park S.....1014 Jefferson, Muskegon
Busard, J. Max.....503 Liberty Life Bldg., Muskegon
Chapin, William S. (A).....638 Sanford St., Muskegon Heights
Christopherson, James W.....1276 Lake Shore Drive, Muskegon
Clapp, Henry W.....88 Strong Ave., Muskegon
Clark, Harry L. (L)....Hackley Hospital Lab., Muskegon
Closz, Harold F.....809 Hackley Union Bank Bldg., Muskegon
Cohan, Sol G.....1114 Second St., Muskegon
Cronick, Anne B.....1067 Pine St., Muskegon
Dasler, A. F.....1507 Peck St., Muskegon
DeLeeuw, Henry.....2144 Peck St., Muskegon Heights
Diskin, Frank.....410 Jackson Ave., Muskegon
Dykhuizen, Harold D.....710 Hackley Union Bank Bldg., Muskegon
Ellis, Nicholas J.....1883 Lake Shore Drive, Muskegon
Emerick, Robert W.....878 N. Second St., Muskegon
Engstrom, Albert O.....Whitehall
Fillingham, Enid.....870 N. Second St., Muskegon
Fleischmann, C. B.....250 W. Webster, Muskegon
Fleishman, Norman A.....1094 Jefferson, Muskegon
Fles, R. J.....1715 Peck St., Muskegon
Folsom, J. D.....1706 Peck St., Muskegon
Gaikema, Everett W.....Muskegon Co. Sanitorium, North Muskegon
Garber, Frank W., Jr.....1178 Third St., Muskegon
Giese, D. H.....210 Lyman Bldg., Muskegon
Goltz, Martha H.....Montague
Greene, Henry P.....764 Pine St., Muskegon
Griffith, Robert M.....68 E. Broadway, Muskegon Heights
Hack, D. W.....1075 Jefferson St., Muskegon
Hanley, W. J.....405 Hackley Union Bldg., Muskegon
Harryman, James E.....1129 Peck St., Muskegon
Hartwell, Shattuck W.,..452 W. Western Ave., Muskegon
Harvey, J. G. K.....Mercy Hospital, Muskegon
Heneveld, Edward H.....1603 Peck St., Muskegon
Heneveld, John (R)..4036 Stamford, Muskegon Heights
Heneveld, R. G. (A).....1458 Montague Ave., Glenside, Muskegon
Hennessy, Mary E 503 Liberty Life Bldg., Muskegon
Hill, J. K.....1095 Third St., Muskegon
Holly, Leland E.....876 Second St., Muskegon
Hornbeck, W. J.....205 Michigan Theater Bldg., Muskegon
Jesson, R. M.....1129 Peck St., Muskegon
Joistad, Arthur H., Jr.....878 N. Second St., Muskegon
Kane, Thomas J.....179 Strong Ave., Muskegon
Kay, Cecelia S.....1533 Peck St., Muskegon
Keilin, Marie (L)....504 Liberty Life Bldg.,, Muskegon
Kerr, Howard J.....1441 Lakeshore Drive, Muskegon
Kleaveland, I. J.....1633 Peck St., Muskegon
Lapham, Landon M.....Whitehall
Lange, Eugene W.....Mercy Hosp., 1520 Fifth St., Muskegon
Lauretti, Emil J.....815 Hackley Union Bldg., Muskegon
Laurin, Vilda S.....804 Hackley Union Bldg., Muskegon
LeFevre, Louis L.....450 W. Western Ave., Muskegon
LeFevre, William M.....289 W. Western, Muskegon
Loder, Leonel L.....Hackley Union Bldg., Muskegon
Loomis, John L. (R).....Route #2, Box 884, Vista, Calif.
Lowry, Robert A.....1516 Peck St., Muskegon
Maire, L. E.....506 Liberty Life Bldg., Muskegon
Mandeville, C. B.....515 Hackley Union Bank Bldg., Muskegon
Maples, Douglas E.....402 Center St., North Muskegon
McLean, D. B.....878 N. Second St., Muskegon
McNair, John N.....967 Second St., Muskegon
Medema, Paul E.....1017 Sanford, Muskegon
Meengs, Marvin B.....1725 Peck St., Muskegon
Miller, Philip L.....1755 Peck St., Muskegon
Mulder, Lambertus.....Hackley Union Bldg., Muskegon
Mulligan, A. W.....1260 Jefferson St., Muskegon
Oden, Constantine L. A.....804 Hackley Union Bank Bldg,. Muskegon
Paterson, L. C.....1095 Third St., Muskegon
Pettinga, F. L.....1603 Peck St., Muskegon
Powers, Lunette I. (E)....337 Morris Ave., Muskegon
Prentice, Edwin W.....1017 Sanford St., Muskegon
Price, Leonard.....1282 Arthur St., Muskegon
Risk, Robert D.....1160 Ransom St., Muskegon
Scholle, Norbert W.....2500 Peck St., Muskegon Heights
Sears, Richard.....36 W. Muskegon Ave., Muskegon
Shebasta, Emil M.....1075 Jefferson, Muskegon
Stubbart, F. J.....2416 Peck St., Muskegon
Swartout, W. C. (L).....514 Hackley Union Bank Bldg., Muskegon
Swedenburg, R. D.....Liberty Life Bldg., Muskegon
Swenson, Leland L.....1706 Peck St., Muskegon
Tellman, H. Clay.....706 Hackley Union Bank Bldg., Muskegon
Thieme, S. W. (L).....Ravenna
Thornton, Eugene S. (L)....802 Hackley Union Bank Bldg., Muskegon
Toy, Charles M.....1067 Pine St., Muskegon
Tyler, William H.....1435 Peck St., Muskegon
Vanderlaan, John E.....1624 Peck St., Muskegon
Vandervelde, C. A.....703 Hackley Union Bank Bldg., Muskegon
VanGelder, W. E.....Hackley Union Bank Bldg., Muskegon
Wagenaar, Edward H.....404 Liberty Life Bldg., Muskegon
White, W. G., Jr.....204 Michigan Theatre Bldg., Muskegon
Wiersma, Silas C.....Hackley Union Bldg., Muskegon
Wildgren, Bernard C.....416 Hackley Bank Bldg., Muskegon
Wilke, Carl A.....Montague
Williams, Edward V.....905 Jarman St., Muskegon Heights

NEWAYGO COUNTY

Carter, Laura J.....Grant
Deur, Theodore R.....Grant
Geerlings, Lambert J.....20 N. Division St., Fremont
Klein, J. Paul.....16 W. Sheridan, Fremont
Masters, Brooker L.....111 W. Dayton St., Fremont
Moore, Hugh R.....38 State St., Newaygo
O'Neill, John W.....White Cloud
Paxton, Robert.....40 W. Sheridan, Fremont
VandenBerg, Tunis.....20 N. Division Ave., Fremont
Veenschoten, Girard.....Hesperia

NORTH CENTRAL COUNTIES

Backe, John C.....Box 434, Gaylord
Barstow, Richard G.....429 N. Center St., Gaylord
Boehm, John D. (R).....West Branch
Clippert, Clarence G.....308 Michigan Ave., Grayling
Crandell, Clare H.....420 E. Houghton, West Branch
Coulter, Keith D.....Gladwin
Egle, Joseph L.....Northern Michigan TB San., Gaylord
Forney, F. A. (L).....544 North Fairlane, Midland
Hasty, Earl A.....115 Burgess, West Branch
Hayes, Louis F. (M).....USAH AU APO 43, San Francisco, Calif.
Henig, B. Elmore.....308 Michigan Ave., Grayling
Howarth, Thomas.....Gladwin
Jardine, Hugh M.....109 S. Third St., West Branch
Libke, Robert S.....119 E. Main St., Gaylord
Martzowka, M. A.....Roscommon
McKillop, G. L.....124 East Main St., Gaylord
Mikan, V. Robert.....308 Michigan Ave., Grayling
Oppy, Charles L.....Roscommon
Peckham, Richard C.....146 W. Main St., Gaylord
Rodda, E. H.....308 Michigan Ave., Grayling
Schaiberger, George L.....707 W. Hought St., West Branch
Stealy, Stanley A.....Box 485, Grayling
Timreck, Harold A.....Gladwin
Van Oosten, H. E.....115 Burgess, West Branch

NORTHERN MICHIGAN COUNTIES

Allen, Robert.....Petoskey
Alm, B. T.....Petoskey
Blum, Benjamin B.....Petoskey
Burns, Dean C.....314½ Howard St., Petoskey
Cameron, W. J.....413 Madison, Petoskey
Conkle, Guy C. (E).....Boyne City
Conklin, F. L.....Burt Lake
Conti, Joseph B.....Petoskey
Conway, William S.....Burns Clinic, Petoskey
Cooke, Robert F.....Burns Clinic, Petoskey
Crippen, Edward F.....126½ State St., Mancelona
Drake,, G. A., Capt., MC (M)....6407th USAF Hosp., APO 323, San Francisco, Calif.
Duffie, Don H. (L).....Central Lake
Elliott, D. C.....Burns Clinic, Petoskey
Grate, Lawrence E.....112 Clinton St., Charlevoix
Hegener, A. J.....Petoskey
Hepworth, C. I.....320 N. Huron St., Cheboygan
Hodges Roy W. (L).....Mackinac City
Kirk, T. R., Maj., MC (M).....2355th Per. Pro. Sq., Pier 91, Seattle, Wash.
Larson, Walter E.....320 N. Huron St., Cheboygan
Lawrie, G. K.....816 Spruce St., Petoskey
Lentini, Nicholas.....Cheboygan
Litzenburger, Albert F.....Boyne City
Martin, R. G.....103 Clinton St., Charlevoix
Mateskon, V. S.....Burns Clinic, Petoskey
Mayne, Frederick C.....Cheboygan
McKnight, Robert Petoskey
Mertz, Joanne E.....Burns Clinic, Petoskey
Pearson, R. E.....Boyne City
Rauch, C. T.....542 S. Huron St., Cheboygan
Reus, Leonard W.....226 Park Ave., Petoskey
Rodger, John R.....Bellaire
Saltonstall, Gilbert B.....112 Clinton St., Charlevoix
Savory, John H.....East Jordan
Stringham, James R.....225 Backus St., Cheboygan
Taylor, R. M.....1109 E. Mitchell St., Petoskey
Terr, Isaac Charlevoix
Vail, Harry F.....St. James
Van Dellen, Jerrian.....East Jordan
Weburg, Kathryn D.....Petoskey

OAKLAND COUNTY

Abbott, Vernon C.....1405 Pontiac State Bank Bldg., Pontiac
Adair, Robin.....602 N. Woodward, Birmingham
Adams, Frederick M.....600 North Woodward Ave., Birmingham
Albrecht, R. W.....2925 Orchard Lake Road, Keego Harbor
Arnkoff, Harry.....218 Riker Building, Pontiac
Aulie, H. G.....500 S. Washington, Royal Oak
Awes, Lorraine E.....1411 Pontiac State Bank Bldg., Pontiac

Baker, Frederick A. (R)....4575 Motorway Drive, Pontiac
Baker, Robert H...1110 Pontiac State Bank Bldg., Pontiac
Bannow, Robert J.....880 Woodward Avenue, Pontiac
Barker, Charles P.....318 Wabeek Bldg., Birmingham
Barker, Howard B.....880 Woodward Ave., Pontiac
Barrett, John L.....264 Washington, Royal Oak
Bauer, Bruce.....23005 John R Street, Hazel Park
Bauer, Edward G.....101½ N. Saginaw, Pontiac
Bauer, Ernest W.....23005 John R St., Hazel Park
Beattie, W. G.....Professional Building, Ferndale
Beck, Otto O.....280 W. Maple, Birmingham
Becker, Anne M.....Pontiac State Hosp., Pontiac
Belknap, Warren F.....1809 S. Main St., Royal Oak
Berger, Charles J.....1413 S. Washington Ave, Royal Oak
Birmingham, J. R.....1809 S. Main St., Royal Oak
Blackwell, Leonard.....549½ N. Perry St., Pontiac
Blakeney, James R.....449 E. Pike St., Pontiac
Blue, Jane.....218 Riker Bldg., Pontiac
Boileau, T. I...2075 E. Fourteen Mile Road, Birmingham
Boucher, R. E.....617 Washington Square Bldg., Royal Oak
Bowers, Charles L.....880 Woodward Ave., Pontiac
Brown, A. L.....523 Riker Bldg., Pontiac
Budd, A. S.....1999 E. 14 Mile Road, Birmingham
Bullard, R. W., Jr.....20 S. Main St., Clarkston
Burger, J. H.....1775 E. 14 Mile Road, Birmingham
Burgess, Charles M.....23235 Woodward Ave., Ferndale
Burke, Chauncey G.....1022 Riker Building, Pontiac
Butler, Samuel A. (L)....Pontiac State Hospital, Pontiac
Byberg, Robert A.....500 S. Washington, Royal Oak
Calhoun, Ethel T.....30405 Grand River, Farmington
Campbell, Malcolm D.....216 Washington Square Bldg., Royal Oak
Carrow, Joyce M.....622 Riker Bldg., Pontiac
Cefai, A. F.....310 Pontiac State Bank Bldg., Pontiac
Chandler, Douglas.....391 Hamilton, Birmingham
Chandler, J. H.....1401 S. Washington, Royal Oak
Cheng, James T.....7350 Cooley Lake Road, Pontiac 11
Christensen, W. L.....109 West 11 Mile Road, Royal Oak
Christie, J. W.....809 Pontiac State Bank Bldg., Pontiac
Clarke, Harriett A.....1414 Pontiac State Bank Bldg., Pontiac
Cline, A. L.....405 Pontiac State Bank Bldg., Pontiac
Cobb, Leon F.....75½ W. Huron, Pontiac
Cobb, Thomas H.....880 Woodward Ave., Pontiac
Collins, Edward F.....1040 Riker Bldg., Pontiac
Condon, F. J.....2401 E. Fourth St., Royal Oak
Conner, Edward D.....3856 South Miller Way, Birmingham
Conrad, C. D.....3027 Woodward, Royal Oak
Cooley, Roy V., Jr.....189 Orchard Lake Ave., Pontiac
Cooper, Robert J.....622 Riker Building, Pontiac
Coucke, Henry O.....1148 S. Woodward Ave., Royal Oak
Crissman, H. C.....22748 Woodward Ave., Ferndale
Crum, Roger E.....411 Pontiac State Bank Bldg., Pontiac
Cudney, Ethan B.....Pontiac Motor Division, Pontiac
Dahlgren, Carl W.....301½ Orchard Lake Road, Keego Harbor
Darling, C. G., Jr.....880 Woodward Ave., Pontiac
Darmstaetter, A. A., Jr. (M).....Cranbrook Road, Bloomfield Hills
Delaney, M. M.....23603 Farmington Road, Farmington

DeLawter, Hilbert H.....277 Pierce, Birmingham
Deutsch, William L.....600 W. First, Huntington Woods
Dobski, Edwin J.....880 Woodward Ave., Pontiac
Drew, Dale R.....880 Woodward Ave., Pontiac
Dunlap, Gregg L.....2925 Orchard Lake Ave., Keego Harbor
Dunn, Lewis E.....3924 Twelve Mile Road, Berkley
Durocher, Normand E.....605 Pontiac State Bank Bldg., Pontiac
Dustin, R. W.....640 N. Woodward, Birmingham
Ekelund, Clifford T.....906 Riker Building, Pontiac
Elder, E. E., Jr.....941½ W. Huron St., Pontiac
Ellis, Ruth 26 Lincoln, Pontiac
Endress, Z. F., Jr...410 Pontiac State Bank Bldg., Pontiac
Engel, J. B.....235 Linden, Birmingham
Esslinger, J. O.....227 Briggs Bldg., Birmingham
Evseeff, G. S.....1401 S. Washington, Royal Oak
Farnham, Lucius A. (L).....538 Riker Bldg., Pontiac
Fellner, W. A.....Fisher Body Division, GMC, Pontiac
Ferris, G. N.....25085 Coolidge, Oak Park
Ferris, Ralph G.....55 W. Maple, Birmingham
Fink, L. Jerome....1411 Pontiac State Bank Bldg., Pontiac
Fitzpatrick, Francis J.....818 Peoples Bank Bldg., Pontiac
Flick, John R.....120 West Second, Royal Oak
Foust, Earl W.....1625 E. Fourth St., Royal Oak
Fox, Ralph M.....640 N. Woodward, Birmingham
Furlong, Harold A.....940 Riker Bldg., Pontiac
Gaba, H. B.....21721 Dequindre, Hazel Park
Gaber, Ben.....10851 W. Ten Mile Road, Oak Park
Gadbaw, Joseph J.....23603 Farmington Road, Farmington
Gaensbauer, Ferdinand.....880 Woodward Ave., Pontiac
Galpin, R. R.....525 Southfield, Birmingham
Garber, M. J.....23606 Farmington, Farmington
Gariepy, Bernard F.....109 W. First St., Royal Oak
Gates, E. M.....206 Riker Building, Pontiac
Gatley, C. R.....97 N. Perry St., Pontiac
Gatley, L. Warren.....97 N. Perry St., Pontiac
Gehringer, Norman F.....880 Woodward Ave., Pontiac
Geib, Ormond D.....First Nat'l Bank Bldg., Rochester
Geist, Edgar J.....413 Woodward Ave., Rochester
Gell, J. W.....940 Riker Bldg., Pontiac
Gerls, Frank B.....602 Peoples State Bank Bldg., Pontiac
Gibson, James C. (E).....206 E. Commerce, Milford
Gibson, R. E.....227 Briggs Bldg., Birmingham
Gibson, Wellington C.....216 Commerce St., Milford
Gill, Matthew J.....324 Riker Building, Pontiac
Goerner, D. M.....390 E. Maple, Birmingham
Goldstein, Herbert.....12701 W. Ten Mile Road, Oak Park
Goode, Norman J., Jr.....1117 South Washington, Royal Oak
Gradolph, Paul L.....23338 Woodward Avenue, Ferndale
Grant, William A. (L).....Milford
Green, R. S.....c/o The Haven Sanitarium, Rochester
Green, William M.....1402 Pontiac State Bldg., Pontiac
Grekin, T. D.....603 W. Eleven Mile Road, Royal Oak
Gustafson, Everett.....236 Riker Bldg., Pontiac
Gutterman, Meyer A.....5085 Coolidge Hwy., Oak Park
Haanes, M. A.....713 Pontiac State Bank Bldg., Pontiac
Hackett, Daniel J.....1205 Peoples State Bldg., Pontiac
Haddock, D. A.....5800 Pontiac Trail, Pontiac
Halsted, Lee H.....33311 Grand River, Farmington
Hammonds, E. E.....209 Wabeek Building, Birmingham
Han, Maolin.....3358 Auburn Road, Auburn Heights
Hardy, George C. (L).....240 Oak Drive, Box 135-G, R.R. No. 2, Rochester
Harvey, Campbell.....832 Riker Bldg., Pontiac
Hasner, R. B. (L).....617 Washington Square Bldg., Royal Oak
Hassberger, J. B.....620 N. Woodward, Birmingham
Hathaway, Clarence L. (L).....33 S. Broadway, Lake Orion
Hathaway, William S.....433½ Main St., Rochester
Henderson, J. E.....4 Barbour Terrace, Bloomfield Hills
Henderson, W. W.....1307 S. Washington, Royal Oak
Hendren, Owen S.....1408 Pontiac State Bank Bldg., Pontiac
Henry, Colonel R.....125 W. Nine Mile Road, Ferndale
Hensley, C. B.....46 W. Flint St., Lake Orion
Hershey, Lynn N.....Route 1, 31275 Franklin Rd., Birmingham
Hoekman, Aben....1740 Hamilton Drive, Route 3, Pontiac
Howlett, E. V. (L).....538 Riker Bldg., Pontiac
Hoyt, Donald F.....1203 Pontiac State Bank Bldg., Pontiac
Hubert, John R., Jr.....880 Woodward Avenue, Pontiac
Hull, Robert P.....23625 Woodward Avenue, Ferndale
Ignatius, A. A.....1915 E. 9 Mile Road, Ferndale
Jacobi, R. C.....37 N. Washington, Oxford
Jones, L. F.....Oakland County TB San., Pontiac
Kazdan, L. L.....13801 W. Nine Mile Road, Oak Park
Keeffe, Eugene J.....St. Joseph Hospital, Pontiac
Kemp, Felix J.....880 Woodward Avenue, Pontiac
Kemp, W. L.....525 Southfield Road, Birmingham
Kendrick, H. F.....206 Riker Building, Pontiac
Ketchum, Jesse.....4219 Manor Road, Royal Oak
Klewicki, H. A.....125 W. Nine Mile, Ferndale
Koehler, William H.....629 Washington Square Bldg., Royal Oak
Kozlow, C. S.....4274 N. Woodward Avenue, Royal Oak
Kozlow, Louis E. Ange.....4274 N. Woodward Avenue, Royal Oak
Kozonis, M. C.....1301 Pontiac State Bank Bldg., Pontiac
Kuhn, Anne K.....4274 N. Woodward Ave., Royal Oak
Kuhn, Henry H.....817 E. Eight Mile Road, Hazel Park
Kuhn, R. E.....4274 N. Woodward Ave., Royal Oak
LaCore, Ivan A.....Pontiac State Hospital, Pontiac
Lahti, Paul T.....325 Washington Square Building, Royal Oak
LaMarche, Norman O.....2827 Woodward, Berkley
Lambert, Alvin G.....3027 N. Woodward Ave., Royal Oak
Lambie, John S. (L).....280 Aspen Road, Birmingham
Landry, R. A.....5807½ Dixie Highway, Waterford
Larson, Alvin R.....880 Woodward Avenue, Pontiac
Laux, Philip J., Jr.....3027 N. Woodward, Royal Oak
Leach, Charles.....525 Southfield, Birmingham
Leaky, Etta Link.....600, 11 Mile Road, Berkley
Leicht, G. P.....1413 S. Washington, Royal Oak
Levine, Bernard.....25101 Coolidge, Oak Park
Lewis, S. M.....400 W. Nine Mile, Ferndale
Lichtwardt, H. E.....606 Woodward, Birmingham
Lilly, R. J.....Pontiac State Hospital, Pontiac
Ling, Theodore W.....23603 Farmington Road, Farmington
Linn, H. J.....Wm. Beaumont Hosp., Royal Oak
Lockwood, C. E. (L).....107 Martha St., Holly
Lowery, A. J.....1538 Union Lake Road, Pontiac
Lyons, R. T.....326 Riker Building, Pontiac
Margrave, Edmund D.....306 W. Ten Mile Road, Royal Oak
Markle, John G.....617 Washington Square Building, Royal Oak
Markley, John M.....849 W. Huron Street, Pontiac
Marra, J. J.....Pontiac General Hospital, Pontiac
Mason, Robert J.....618 N. Woodward Ave., Birmingham
Maxim, E. S.....711 Pontiac State Bank Bldg., Pontiac
McCain, French H.....628 N. Woodward Ave., Birmingham
McConkie, J. P.....311 Wabeek Bldg., Birmingham
McEvoy, F. J.....1715 Crooks Rd., Royal Oak
McHugh, James.....391 Hamilton, Birmingham
McInerney, T. S.....109 W. Eleven Mile Road, Royal Oak
McIntyre, Kenneth.....779 Grand Marais, Grosse Pointe Park
McNeill, H. H.....83½ S. Saginaw, Pontiac
McPhee, E. C.....738 Riker Building, Pontiac
Mehas, C. P.....300 Hickory Grove, Bloomfield Hills
Meinke, Herman A.....817 E. 8 Mile Road, Hazel Park
Meisner, H. E.....15412 W. Nine Mile Road, Oak Park
Mercer, Frank A.....1401 Pontiac State Bank Bldg., Pontiac
Merrill, Lionel N.....330 Washington Square Building, Royal Oak
Milgrom, Sidney.....1229 W. Washington, Royal Oak

Miller, Hazen L.....617 Washington Square Bldg., Royal Oak
Miller, Sidney.....604 N. Woodward Ave., Birmingham
Mimura, J. T.....611 Washington, Royal Oak
Moloney, J. Clark.....414 Arlington, Birmingham
Monroe, John D.....Oakland County Health Dept., Pontiac
Morton, J. A.....St. Joseph Hospital, Pontiac
Mueller, Elmer J.....1775 E. Fourteen Mile, Birmingham
Mumby, C. J.....1409 Pontiac State Bank Bldg., Pontiac
Munson, H. L.....404 Pontiac Trail, Walled Lake
Nalepa, E. I.....880 Woodward Ave., Pontiac
Naz, John F.....20 S. Main St., Clarkston
Neafie, Charles A. (L).....Pontiac City Health Dept., Pontiac
Nessel, J. H.....3355 Barlyn Lane, Bloomfield Hills
Newcomb, Arnold B.....P.O. Box 1036, Berkley
Nichamin, Samuel J.....25101 Coolidge, Oak Park
Nickerson, I. Dean.....6245 Golfview Drive, Birmingham
Norup, John.....2635 Coolidge Hwy., Berkley
Nosanchuk, Joseph I.....1215 Pontiac State Bank Bldg., Pontiac
Olsen, Richard E.....St. Joseph Mercy Hospital, Pontiac
Ormond, J. K.....880 Woodward Avenue, Pontiac
Ott, Harold A.....3019 N. Woodward Avenue, Royal Oak
Palmer, Hayden D.....506 Riker Building, Pontiac
Patrick, C. I.....4721 Dixie Hwy., Drayton Plains
Pauli, Theodore H.....206 Riker Bldg., Pontiac
Payton, Charles F.....1719 Crooks Road, Royal Oak
Pear, E. G.....3023 N. Woodward Ave., Royal Oak
Pearce, James F.....617 Washington Square Bldg., Royal Oak
Pelletier, Charles J.....1914 Vinsetta Blvd., Royal Oak
Petroff, George N.....1301 Pontiac State Bank Bldg., Pontiac
Pierce, W. H.....600 N. Woodward Avenue, Birmingham
Porritt, Ross J.....304 Riker Bldg., Pontiac
Ports, Preston W.....33109 Grand River, Farmington
Prather, F. W.....347 N. Main St., Milford
Prevette, Isaac C.....215 First National Bank Bldg., Pontiac
Prosser, M. G.....3803 Elizabeth Lake Road, Pontiac
Quarton, Albert E., Jr.....3027 N. Woodward, Royal Oak
Quinn, James R.....511 Pontiac State Bank Bldg., Pontiac
Raynale, George P. (L)....302 Wabeek Bldg., Birmingham
Read, James Allen.....610 N. Woodward, Birmingham
Rech, W. R.....404 Pontiac Trail, Walled Lake
Reid, F. T.....49 W. 14 Mile Road, Clawson
Riggs, Harry L.....31 Orchard Lake, Pontiac
Riker, Aaron D.....1012 Riker Bldg., Pontiac
Roehm, Harold R.....322 Wabeek Building, Birmingham
Rowley, Laurie G...4400 Dixie Highway, Drayton Plains
Rupp, Edson C., Jr.....258 Washington Square Building, Royal Oak
Rush, Alva D.....114 S. Woodward Ave., Birmingham
Russell, V. P.....624 Washington Square Bldg., Royal Oak
Rutzky, Julius.....St. Joseph Mercy Hospital, Pontiac
Ruva, J. J.....4463 Dixie Hwy., Drayton Plains
St. John, Harold A.....718 Riker Bldg., Pontiac
Sanford, Glen.....1775 E. 14 Mile Road, Birmingham
Sansone, T. J.....(No Address)
Saunders, Kenneth W.....211 S. Saginaw, Holly
Schlecte, Irwin Carl.....120 Second St., Rochester
Schlecte, Eva L.....120 Second, Rochester
Schmitt, P. E.....258 Washington Square Bldg., Royal Oak
Scholes, D. R.....277 Pierce, Birmingham
Schuneman, Howard....23760 Woodward, Pleasant Ridge
Seaborn, A. J.....1412 S. Washington St., Royal Oak
Segula, Robert L.....326 Riker Bldg., Pontiac
Selman, J. H.....3306 Auburn Avenue, Auburn Heights
Sempere, C. R.....326 Riker Bldg., Pontiac
Sewell, G. R.....217 Wabeek Bldg., Birmingham
Shadley, Maxwell L.....94 Ottawa Drive, Pontiac
Sheffield, Loren C.....420 Riker Bldg., Pontiac
Sheridan, F. Michael.....1307 S. Washington, Huntington Woods
Simpson, E. K. (L).....804 Pontiac State Bank, Pontiac
Smith, Carleton A.....822 Riker Bldg., Pontiac
Smith, Donald S.....824 Riker Bldg., Pontiac
Smith, George E.....629 Washington Square Bldg., Royal Oak
Somers, Donald C.....2338 N. Woodward Ave., Royal Oak
Somerville, W. J.....23760 Woodward Ave., Pleasant Ridge
Sosin, Allen.....23603 Farmington Road, Farmington
Spencer, Lloyd H.....1219 S. Washington, Royal Oak
Spoehr, Eugene L.....22832 Woodward, Ferndale
Spohn, Earl W.....201 S. Center St., Royal Oak
Stageman, J. C.....1203 Pontiac State Bank Bldg., Pontiac
Stahl, H. F.....850 Lapeer Road, Oxford
Stanley, W. F.....1148 S. Woodward, Royal Oak
Starker, C. T. (L).....80 East Iroquois Rd., Pontiac
Steffes, Everette M.....3345 Coolidge Highway, Berkley
Stein, Edward.....25622 Coolidge Highway, Huntington Woods
Steinberg, Norman N.....211 Washington Square Bldg., Royal Oak
Stolpman, A. K.....640 N. Woodward Ave., Birmingham
Stone, Sanford.....26630 W. Six Mile Road, Detroit
Stuecheli, Milton B.....Beaumont Hospital, Royal Oak
Sutton, Palmer E.....629 Washington Square Bldg., Royal Oak
Swickle, Edward F.....17 S. Main, Clawson
Tauber, Abraham.....1108 Peoples State Bank Bldg., Pontiac
VandenBerg, Kenneth.....538 Riker Building, Pontiac
Van Zoeren, Jay c/o the Haven Sanitarium, Rochester
Virga, George M.....715 N. Main Street, Royal Oak
Wagner, Ruth E.....201 First Street, Royal Oak
Wake, Douglas L.....1307 S. Washington, Royal Oak
Ward, W. Paul.....208 Wabeek Building, Birmingham
Watson, Thomas Y.....640 N. Woodward Ave., Birmingham
Webber, Lynn T.....7350 Cooley Lake Road, Pontiac
Weisberg, William W.....25201 Coolidge Hwy., Detroit
Wessells, Robert R.....302 Wabeek Building, Birmingham
Westfall, E. J.....230 Washington Square Bldg., Royal Oak
Westmaas, W. J.....1250 Villa, Birmingham
White, Robert H.....379 Hamilton, Birmingham
Whitehouse, J. D.....The Haven Sanitarium, Rochester
Wigent, Ralph D.....c/o Pontiac Motor Div., GMC, Pontiac
Williams, John P.....1102 Peoples State Bldg., Pontiac
Willis, Maurice E.....1411 Pontiac State Bank Bldg., Pontiac
Young, Arthur R.....906 Riker Building, Pontiac
Zackheim, Herschel S.....114 S. Lafayette, Royal Oak
Zimmerman, Walter J.....258 Washington Square Bldg., Royal Oak
Zujko, Alphonse J.....1402 Pontiac State Bank Bldg., Pontiac

OCEANA COUNTY

Diehl, Clarence E.....Shelby
Flint, Charles H. (A)....718 Fifth St., 401 Hillside Apt., Rochester, Minn.
Hasty, Willis A.....405 State St., Shelby
Hayton, A. R. (L).....327 Michigan Ave., Shelby
Mullen, W. R.....Pentwater
Munger, L. P. (E).....Hart
Reetz, Fred A. (A).....Shelby
Robinson, Wm. G.....219 State St., Hart
Vrbanac, John J.....22 N. State St., Hart
Williams, H. L.....Hart
Wood, Merle G.....19 Courtland St., Hart

ONTONAGON COUNTY

Archibald, D. H.....White Pine
Bender, Jesse L. (L).....Mass
Hogue, H. B.....Ewen
Lahti, Carl R.....800 Zinc St., Ontonagon
Strong, William F.....800 Chippewa, Ontonagon

OTTAWA COUNTY

Arendshorst, Wm., Jr.....121 W. 24th St. Holland
Bazuin, C. H.....313 N. River Ave., Holland
Beernink, E. H.....222½ Washington, Grand Haven
Bloemendaal, D. C.....47 E. Main St., Zeeland
Bloemendal, W. B.....300 Franklin St., Grand Haven
Boersma, Vernon L.....121 W. 24th St., Holland
Bonzelaar, Alvin.....788 Columbia, Holland
Boone, C. E.....101½ E. Main St., Zeeland
Bulthuis, Jerry E.....Jamestown
Clark, Nelson H.....11 West Eighth St., Holland
Cook, C. S.....121 W. 24th St., Holland
DeVries, H. G.....30 E. Ninth St., Holland
DeVries, Peter J.....214 Washington, Grand Haven
DeYoung, F. W.....205 W. Savidge St., Spring Lake
Frieswyk, Melvin J.....241 E. Main, Zeeland
Groat, F. L.....631 Franklin St., Grand Haven
Hager, Ralph.....Hudsonville
Hamelink, M. H.....196 W. 32nd St., Holland
Harms, H. P.....17 West 10th St., Holland
Heard, William.....414 Franklin St., Grand Haven
Kearney, Joseph B.....121 W. 24th St., Holland
Kemme, Gerrit J.....Rt. #3, Zeeland
Kitchel, John H.....414 Franklin St., Grand Haven
Kitchel, Mary S.....414 Franklin St., Grand Haven
Kools, William C.....14 W. 8th St., Holland
Kuipers, S. W.....431 Washington St., Holland
Long, C. E. (L).....222 Franklin St., Grand Haven
McArthur, Peter A.....414 Franklin St., Grand Haven
Moerdyk, William G.....Washington Square, Holland
Nichols, Rudolph H.....33 W. 8th St., Holland
Nykamp, Russell.....39 E. Main St., Zeeland
Post, J. J.....Allendale
Rottschaefer, William.....17 W. Tenth St., Holland
Rypkema, W. M.....228½ Washington St., Grand Haven
Schaftenaar, R. H.....17 West 10th St., Holland
Stobbelaar, Robert.....107 S. Second St., Grand Haven
Ten Have, Ralph.....1016 Sheldon, Grand Haven
Ten Pas, Henry.....Hamilton
Timmerman, E. C.....Coopersville
Van Appledorn, C. J.....99 West 23rd St., Holland
VanderBerg, E. E.....17 West Tenth St., Holland
van der Velde, Otto.....35 W. 8th St., Holland
VandeWaa, Alfred J.....200 E. Main St., Zeeland
Van Kolken, P. J.....509 Franklin St., Grand Haven
Ver Duin, J. W.....223 Washington, Grand Haven
Wells, K. N.....119 W. Savidge St., Spring Lake
Westrate, Warren K.....17 West Tenth St., Holland
Westrate, William.....17 West Tenth St., Holland
Westrate, William Jr.....17 West Tenth St., Holland
Winter, John K.....10 E. 10th St., Holland
Winter, W. G., Jr.....10 East Tenth St., Holland
Yff, J. H.....511 E. Central Ave., Zeeland
Yonkman, Frederick F...58 Pomeroy Rd., Madison, N. J.

SAGINAW COUNTY

Ackerman, G. L.....124 S. Jefferson Ave., Saginaw
Albers, M. J.....218 Ardwssi, Saginaw
Anderson, William K.....404 S. Warren Ave., Saginaw
App, R. G.....520 W. Genesee Ave., Saginaw
Bagley, Ulysses S. (R).....1401½ N. Sixth St., Saginaw
Bass, V. V.....826 N. Michigan Ave., Saginaw
Berberovich, Thomas F.....2005 N. Michigan Ave., Saginaw
Bishop, H. M.....515 S. Jefferson, Saginaw
Brender, Fred P.....117 Hubinger St., Frankenmuth
Brock, W. H. (L).....9 Merrill Bldg., Saginaw
Bruggers, Lawrence.....1703 N. Michigan Ave., Saginaw
Bruton, M. F.....280 Stephens Road, Grosse Pointe Farms
Bucklin, Robert V.....1447 N. Harrison, Saginaw
Buehrig, Robert.....5790 M-15, Clarkston
Bullington, Bert M.....2000 Court St., Saginaw
Busch, F. J.....1731 N. Michigan, Saginaw
Butler, Milton G.....502 S. Jefferson, Saginaw
Cady, D. J.....405 Thompson, Saginaw
Cady, Frederick J.....402 S. Jefferson Ave., Saginaw
Cady, F. J., Jr.....402 S. Jefferson Ave., Saginaw
Cambridge, V. W.....727 N. Jefferson, Saginaw
Cameron, A. K.....409 First Savings & Loan Bldg., Saginaw
Campbell, Lloyd A.....335 Brockway Place, Saginaw
Caumartin, Hugh T...1537 S. Washington Ave., Saginaw
Chisena, Peter R.....6221 Dixie Highway, Bridgeport
Claytor, Archer A.....1000½ N. Third Ave., Saginaw
Comer, Walter H. (M).....Valley Forge Army Hosp., Phoenixville, Penna.
Cortopassi, Andre J.....324 S. Washington, Saginaw
Cortopassi, Vital E.....324 S. Washington Ave., Saginaw
Cory, Charles W.....1227 N. Michigan, Saginaw
Curts, James H.....127 S. Washington, Saginaw
Durman, Donald C.....408 S. Jefferson Ave., Saginaw
Ely, Cecil W.....1820 Janes St., Saginaw
Ernst, A. R. (R).....4004 Woodland Drive, Falls Church, Virginia
Farley, A. W., Jr.....1803 N. Michigan Ave., Saginaw
Feeheley, R. D.....808 N. Michigan Ave., Saginaw
Fleschner, T. E.....7450 W. Birch Run Road, Birch Run
Freidrick, D. F.....505 W. Tuscola, Frankenmuth
Gage, D. P.....2002 Court St., Saginaw
Galsterer, Edwin C.....124 S. Jefferson Ave., Saginaw
Gamon, A. E., II.....2004 Court St., Saginaw
Gardner, J. H.....815 N. Michigan Ave., Saginaw
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Goodsell, J. O.....408 S. Jefferson, Saginaw
Grigg, Arthur P.....320 N. Michigan Ave., Saginaw
Hand, Eugene A.....211 Bearinger Bldg., Saginaw
Harvie, L. C.....405 Wiechmann Bldg., Saginaw
Heavenrich, Robert M.....529 W. Genesee, Saginaw
Helmkamp, Herbert O.....333 S. Jefferson, Saginaw
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Jaenichen, Robert F. T.....530 Hayden, Saginaw
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Murray, Charles R.....1827 N. Michigan Ave., Saginaw
Murray, Morris J.....603 S. Jefferson, Saginaw
Naglins, Jekeb.....Chev. Grey Iron Foundry, Saginaw
Nelson, Oscar A.....120 N. Michigan, Saginaw
Northway, R. O.....505 First Savings & Loan, Saginaw
Novy, Frank O.....420 S. Jefferson, Saginaw
Olson, Carl Porter.....405 First Savings & Loan Bldg., Saginaw
Ostrander, Frank W. (L)... Freeland
Phillips, H. A.....419 First Savings & Loan Bldg., Saginaw
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Prior, R. W. (M).....125 Waverly, Highland Park
Richards, Ned W.....3518 State St., Saginaw
Richter, Harry J.....604 Second National Bank Bldg., Saginaw
Roggen, Ivan J.....1227 N. Michigan Ave., Saginaw
Ruskin, D. B.....120 N. Michigan Ave., Saginaw
Ryan, M. D. (E).....635 S. Washington Ave., Saginaw
Ryan, Richard S.....633 S. Washington Ave., Saginaw
Sample, John T.....606 Rust St., Saginaw
Sargent, Donald V.....1703 N. Michigan Ave., Saginaw
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Schneider, A. J. N.....509 S. Jefferson Ave., Saginaw
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Sharp, Martin C.....1803 N. Michigan, Saginaw
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Smith, John C.....920 Stone St., Saginaw
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Yntema, Stuart.....331 S. Jefferson, Saginaw

ST. CLAIR COUNTY

Bailey, R. S.....400 Michigan Bank Bldg., Port Huron
Banting, Kenneth C.....403 Peoples Bank Bldg., Port Huron
Barss, Joseph A. (M).....301 National Bank Bldg., Port Huron
Battley, J. C. Sinclair.....940 Military Ave., Port Huron
Beck, Frank K.....901 Lapeer, Port Huron
Beer, Joseph F.....104 N. Riverside, St. Clair
Biggar, R. J.....Bahrein Petroleum Co., c/o Calif. Texas Co., 380 Madison Ave., New York 17
Borden, Charles L.....216 Sperry Bldg., Port Huron
Bottomley, Thomas H., Jr.....1102 Sixth St., Port Huron
Boughner, W. H.....325 Pleasant St., Algonac
Bovee, M. E.....2208 Stone St., Port Huron
Bowden, William S.....137 S. Water St., Marine City
Brush, Howard O.....612 Peoples Bank Bldg., Port Huron
Cantwell, John D., Jr.....612 Peoples Bank Bldg., Port Huron
Carey, L. M. (R).....604 Oakwood Ave., New Smyrna Beach, Florida
Carney, F. V. (R).....1065 N. Riverside St., St. Clair
Carrie, R. G.....1201 St. Clair River Drive, Algonac
Cleland, William D., Jr.....208 Sperry Bldg., Port Huron
Clifford, Robert P.....506 S. Riverside, St. Clair
Clyne, B. C.....103 N. Main St., Yale
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Coury, John J., Jr.....301 Michigan Bank Bldg., Port Huron
Davison, William T.....1108 Military St., Port Huron
Dinnen, W. J., Jr...606 Peoples Bank Bldg., Port Huron
Douvas, Nicholas A.....311 Pine St., Port Huron
Gholz, A. C.....208 Sperry Bldg., Port Huron
Gilmore, John R.....317 Mich. National Bank Bldg., Port Huron
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Hoyt, C. N.....804 Huron Ave., Port Huron
James, F. L.....1209 Willow St., Port Huron
Kahn, Oscar B. (M).....Capac
Kesl, George M.....316 Sperry Bldg., Port Huron
Kirban, H. N.....1209 Willow St., Port Huron
Kirker, F. O.....1601 N. Riverside Drive, St. Clair
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Lauridsen, James.....1010 Pine Grove, Port Huron
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Ludwig, Claude A.....916 Seventh St., Port Huron
Ludwig, F. E.....916 Seventh St., Port Huron
Lugg, R. M.....940 Military St., Port Huron
MacPherson, C. A. (R).....441 Spring Lane St., Louisville, Kentucky
Martin, Clyde S.....204 Sperry Bldg., Port Huron
McColl, D. J. (E).....312 Sperry Bldg., Port Huron
McCoy, L. F.....ARAM Co. Dahran, Saudi, Arabia
Meredith, E. W.....1102 6th St., Port Huron
Mohney, G. E.....311 Pine St., Port Huron
Morris, A. N.....204 Sperry Bldg., Port Huron
Novak, Walter S.....310 E. Water St., Port Huron
Patterson, D. Webster.....622 Huron Ave., Port Huron
Pollock, D. A. (A).....833 Mt. Pleasant, Ann Arbor
Rowe, R. E.....600 Park St., Port Huron

Sanderson, Joseph L.....515 Pine St., Port Huron
Sands, G. E.....3179 Armour St., Port Huron
Schaefer, W. A.....302 Michigan Nat'l Bank Bldg., Port Huron
Selby, C. D.....1916 Military, Port Huron
Serniak, J. A.....104 S. Main St., Yale
Sites, E. C...301 Michigan Nat'l Bank Bldg., Port Huron
Tisdel, James H.....310 E. Water St., Port Huron
Tomsu, G. F.....310 E. Water St., Port Huron
Townley, Charles O.....312 Sperry Bldg., Port Huron
Treadgold, Douglas.....1323 Military St., Port Huron
Ulmer, Arthur H., Jr.....303 Sperry Bldg., Port Huron
VanRhee, George....323 Peoples Bank Bldg., Port Huron
Walker, S. C.....312 Sperry Bldg., Port Huron
Ware, John R.....3107 24th St., Port Huron
Wass, Henry C.....115 Adams St., St. Clair
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ST. JOSEPH COUNTY

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Braham, W. G.....111 S. Monroe, Sturgis
Brunson, Allen E.....206 E. West St., Sturgis
Evans, R. H.....111 S. Monroe, Sturgis
Fiegel, Samuel A.....111 S. Monroe St., Sturgis
Fortner, Roscoe J.....137 Portage, Three Rivers
Gillespie, Eleanor M.....103 S. Fourth St., Sturgis
Jacobowitz, John M.....49½ N. Main St., Three Rivers
Lamb, Harry.....110 Pleasant, Sturgis
Lepard, Olin L.....104 S. Lakeview, Sturgis
Miller, Charles G. (L).....106 W. Chicago Road, Sturgis
O'Dell, C. W.....117 Spring St., Three Rivers
O'Dell, J. H., Jr.....117 Spring St., Three Rivers
Olney, Harold E.....Leonidas
Pennington, Harry C.....118 S. Kalamazoo, White Pigeon
Penzotti, S. C.....117 S. Spring St., Three Rivers
Porter, C. G.....226 East St., Three Rivers
Shaw, George D.....117 Spring, Three Rivers
Sheldon, John P.....206 E. West St., Sturgis
Slote, Leal K. (E).....157 S. Washington, Constantine
Smith, R. D.....234 S. Main, Colon
Springer, R. A. (R).....Centerville
Weisheit, H. R.....204 E. West St., Sturgis
Zimont, Raymond D.....100 S. Washington, Constantine

SANILAC COUNTY

Bennett, W. G. (M)..U. S. Public Health Service Hosp., Browning, Mont.
Blanchard, Ernest W.....Deckerville
Cripps, J. R.....6341 Morris, Marlette
Ford, Frances A.....Applegate
Gift, Weldon A.....Marlette
Hart, Robert K.....Howard St., Croswell
Jayson, Michael H.....Marlette
McCrea, John W.....Marlette
McGunegle, K. T.....Sandusky
Muir, Neil.....Croswell
Seager, M. C.....Brown City
Smith, Duane.....Brown City
Tweedie, G. Evans.....Sandusky
Tweedie, S. Martin.....Sandusky
Winfield, Raymond J.....Marlette

SHIAWASSEE COUNTY

Arnold, Alfred L., Jr.....812 Bradley St., Owosso
Austin, Eugene S.....319 E. Exchange, Owosso
Bach, Norman F.....113 E. Williams St., Owosso
Brown, Richard C.....113 E. Williams St., Owosso
Brown, Richard J.....113 E. Williams, Owosso
Buzzard, Walter D.....Chesaning
Chipman, E. M.....502 W. Williams, Owosso
Ford, Wm. A. J.....1107 W. Oliver St., Owosso
Grommons, J. R.....Durand
Graves, James H.....511 W. Main St., Owosso
Gurden, Elizabeth L.....113 E. Williams St., Owosso
Harkness, Carleton A.....113 E. Williams St., Owosso
Harroun, John E.....306 Matthews Bldg., Owosso
Hoshal, Verne L.....104 W. Clinton, Durand
Lieber, Robert W.....103 E. Clinton St., Durand
MacGregor, J. F. (M).....113 E. Williams St., Owosso
McKnight, Edwin R.....320 N. Washington Ave., Owosso
Merz, Walter L.....224 N. Ball St., Owosso
Moore, P. J.....113 E. Williams, Owosso
Pochert, R. C.....Matthews Bldg., Owosso
Prevette, J. E.....113 E. Williams St., Owosso
Richards, Chester J.....Durand
Sahlmark, Joseph F.....812 Bradley, Owosso
Sheperd, W. F.....Matthews Bldg., Owosso
Wachtel, A.....812 Bradley, Owosso
Weinkauf, William F.....Corunna
Weston, C. L.....Matthews Bldg., Owosso
Willoughby, William A. (A).....29711 Winter Drive, Garden City

TUSCOLA COUNTY

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Cook, Raymond.....Akron
Dickerson, Willard W.....Caro State Hospital, Caro
Donahoe, Harold T.....Cass City
Elmendorf, Edward N.....Vassar
Flett, Richard O.....Millington
Gilbert, Donald E.....Mayville
Gugino, Frank J.....Reese
Howlett, R. R.....624 W. Frank St., Caro
Merrill, Elmer H.....South State St., Caro
Miles, E. J.....Caro
Morris, F. L.....Cass City
Nigg, Herbert L.....Caro
Savage, Lloyd L.....General Delivery, Caro
Swanson, E. C.....Vassar
Von Renner, Otto (L).....Vassar

VAN BUREN COUNTY

Boothby, Carl F.....Hartford
Boothby, F. M.....Lawrence
Bope, William P. (E).....Decatur
Buckborough, M. W.....South Haven
Cooper, Joseph.....Bangor
Dillon, Thomas J.....RFD No. 3, Paw Paw
Gano, Avison.....417 Monroe St., Bangor
Giffen, John R. (E).....Bangor
Holm, Leo H.....Gobles
Itzen, J. F.....330½ Center St., South Haven
Johnson, Harold, Jr.....304 Oak Street, Paw Paw
Kleber, John A.....South Haven
Loomis, F. J.....Paw Paw
McFadden, R. I.....Bloomingdale
Morgan, D. K.....326 Michigan Ave., South Haven
Parks, A. E.....Lawton

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Staggs, Adelbert L.....Hartford
Steele, Arthur H.....Paw Paw
Ten Houten, Charles.....Paw Paw
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WASHTENAW COUNTY

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Bringard, Elmer L.....16901 James Couzens, Detroit 35
Brisson, Joseph C.....9191 Whittier, Detroit 24
Bristol, William R.....6142 Bishop Road, Detroit
Broadman, Sylvan A.....16401 Grand River, Detroit 27
Broderson, H. S.....10720 W. Jefferson, River Rouge
Bromme, William.....10 Peterboro, Detroit 1
Bronson, W. W.....22128 Grand River, Detroit 19
Brooks, Charles W.....1605 Atkinson, Detroit
Brooks, Eugene W.....3130 Guardian Bldg., Detroit 26
Brooks, Nathan.....1001 Kales Bldg., Detroit
Brosius, C. O.....41001 Seven Mile Road, Northville
Brosius, William L.....Harper Hospital, Detroit
Brough, Glen A.....1402 David Whitney Bldg., Detroit
Brown, A. G.....12065 Wyoming, Detroit
Brown, Audrey O.....742 Maccabees Bldg., Detroit
Brown, Carlton F.....15800 W. McNichols Road, Detroit 35
Brown, Charles H.....3152 Biddle Ave., Wyandotte
Brown, E. M.....13123 La Salle, Huntington Woods
Brown, Frances.....1940 Lincolnshire, Detroit
Brown, Gordon T.....13000 Hayes Ave.. Detroit 5
Brown, Harvey F.....3714 W. McNichols Road, Detroit 21
Brown, Henry S.....18101 James Couzens Highway, Detroit 2
Brown, J. F.....Wayne County General Hospital, Eloise
Brown, John R.....702 Maccabees Bldg., Detroit 2
Brown, Robert A.....3529 Jefferson, Ecorse
Brown, Samuel M.....16500 Wyoming Ave., Detroit 21
Brown, Stanley H.....8544 W. McNichols Road, Detroit 21
Brown, Thomas A.....5430 W. Warren Ave., Detroit
Brownell, Paul G.....18916 Woodward Ave., Detroit 3
Bruder, R. C.....10149 Michigan Ave., Dearborn
Bruehl, R. A. (A).....4303 Yorkshire, Detroit 24
Bruer, E. L.....12170 Fort St., Wyandotte
Bruer, E. S.....12170 Fort St., Wyandotte
Brundage, R. D.....1914 Edgewood, Dearborn
Brunke, Bruno B.....7765 Mack Ave., Detroit 14
Brush, Brock Edwin.....2799 W. Grand Blvd., Detroit
Bryan, Donald I.....704 Medical Arts Bldg., 13700 Woodward Ave., Highland Park
Bryan, J. B.....Henry Ford Hospital, Detroit 2
Bryce, John D.....5400 Trumbull, Detroit 8
Budd, Richard D.....Northville State Hosp., Northville
Budson, Daniel.....10300 W. Seven Mile Road, Detroit 21

Buell, John H.....901 David Whitney Bldg., Detroit 26
Buerki, Robin C.....Henry Ford Hospital, Detroit
Buller, H. L.....4120 Fenkell Ave., Detroit
Burke, Ralph M.....742 Maccabees Bldg., Detroit 2
Burnham, David C.....13700 Woodward Ave., Highland Park
Burns, R. E.....Henry Ford Hospital, Detroit 2
Burns, R. T.....11110 Morang, Detroit 24
Burnside, H. B.....20403 Stratford, Detroit 21
Burnstine, Julius Y.....45 Owen Ave., Detroit
Burnstine, Perry P.....434 W. Palmer, Detroit 2
Burr, George C.....1706 David Whitney Bldg., Detroit 26
Burr, H. Leonard.....168 Fisher Rd., Grosse Pointe
Burroughs, R. G.....1449 David Whitney Bldg., Detroit
Burrows, Howard A.....10423 W. Warren, Dearborn
Burstein, Harry S.....2950 W. Grand Blvd., Detroit 2
Burstein, I. Marvin....2950 W. Grand Blvd., Detroit 2
Burstein, Morris M.....2950 W. Grand Blvd., Detroit 2
Burton, D. T.....54 Arden Park, Detroit
Burton, Irving F.....14624 East 7 Mile Road, Detroit
Bush, Glendon J.....18901 W. McNichols Rd., Detroit 19
Bush, L. M.....18950 Woodward Ave., Detroit
Butler, Harry J. (L).....33 Waverly, Highland Park 3
Butler, John D.....1308 Broadway, Detroit 26
Butler, H. R.....3529 E. Jefferson, Ecorse
Butler, J. Payne.....3403 W. Warren, Detroit 8
Butler, Lawrence H.....14521 E. Seven Mile Rod., Detroit
Butler, Volney N.....806 Mutual Bldg., Detroit 26
Buttrum, Edward J.....14755 Fenkell, Detroit 27
Byers, Dudley W.....8934 Oakland Ave., Detroit

Cadieux, Henry W. (L)....103 E. Grand Blvd., Detroit 7
Cadwell Howard....Wayne County Health Dept. Eloise
Cahalan, Joseph L.....214 David Whitney Bldg., Detroit 26
Cain, Waldo L.....8033 Twelfth St., Detroit 6
Caldwell, George L.....12017 Jos. Campau, Detroit 2
Caldwell, J. R.....2799 W. Grand Blvd., Detroit 2
Calkins, H. N.....15302 Gilchrist, Detroit
Callaghan, Thomas T.....312 Professional Bldg., Detroit
Cameron, A. H.....2853 Biddle, Wyandotte
Cameron, D. A.....23401 Ford Rd., Dearborn
Campbell, Charles A.....12922 West Warren, Dearborn
Campbell, Duncan.....9203 Grand River, Detroit 4
Campbell, Duncan A. (E)....1613 David Whitney Bldg., Detroit 26
Campbell, Kenneth N.....22932 Woodward, Detroit 20
Campbell, Mary B.....660 Seward St., Detroit 2
Campbell, M. D.....3339 Grand, Detroit 38
Campbell, Robert E.....8445 E. Jefferson, Detroit 14
Campbell, Thelma M. Wygant.....22375 Garrison, Dearborn
Candler, C. L.....20040 Mack Ave., Grosse Pointe Woods 30
Canter, Allie L.....13700 Woodward Ave., Detroit 3
Canter, G. E.....13732 Woodward Ave., Detroit 3
Cantor, Herbert C.....668 Maccabees Bldg., Detroit 2
Cantor, Meyer O.....666 Maccabees Bldg., Detroit 2
Cantow, L. A.....829 Fisher Bldg., Detroit 2
Capano, Oreste A.....16401 Grand River, Detroit 7
Capellari, Elmer.....310 E. Jefferson, Detroit 26
Caputo, Joseph M.....22575 Nona Ave., Dearborn
Caputo, Nancy.....18145 Mack, Detroit
Capuzzi, Eugene T...24644 Gleneyrie Drive, Birmingham
Caraway, J. E.....355519 Norris St., Wayne
Carbone, Louis A.....14711 Gratiot, Detroit 5
Carlisle, J. C.....1221 Lincoln, Lincoln Park
Carlson, Harold W.....18070 Wildemere, Detroit 21
Carmichael, Edward K.....7815 E. Jefferson, Detroit 14
Carnes, H. E.....Parke, Davis & Co., Detroit 32
Carp, Joseph.....8839 Mt. Elliott, Detroit 11
Carpenter, C. J.....3835 Biddle St., Wayne
Carpenter, Glenn B.....1416 David Whitney Bldg., Detroit 26
Carpenter, William S.....1317 David Whitney Bldg., Detroit 26
Carr, J. G.....14111 Korte, Detroit
Carrick, Lee.....1515 Kales Bldg., Detroit 26
Carroll, Elmer H.....9920 Stoepel Ave. Detroit 4
Carroll, Lona B.....1066 Maccabees Bldg., Detroit 2
Carson, Herman J.....7745 Puritan, Detroit 21
Carstens, H. R.....83 Longhill St., Springfield 8, Mass.
Carter, John M.....613 David Whitney Bldg., Detroit 26
Carter, L. F.....613 David Whitney Bldg., Detroit 26
Cassidy, William J.....1737 David Whitney Bldg., Detroit 26
Castle, M. E.....18090 Wyoming, Detroit 21
Castrop, Charles W.....10149 Michigan Ave., Dearborn
Catherwood, Albert E.....1337 David Whitney Bldg., Detroit 26
Caton, Dorothy F.....17144 Oak Drive, Detroit 21
Caughey, A. F., Jr.....16889 James Couzens, Detroit 35
Caughey, Edgar H.....11301 Whittier, Detroit 24
Caumartin, F. E.....17184 Wildemere, Detroit 21
Cellar, Frank A.....944 Maccabees Bldg., Detroit
Ceravolo, Albert J.....Bon Secours Hosp., Grosse Pointe 30
Ceresko, A. R.....18650 W. Warren, Detroit 10
Cetnar, E. J.....20901 Moross, Grosse Pointe 36
Chabut, V. George.....206 W. Dunlap, Northville
Chalat, N. I.....212 David Whitney Bldg., Detroit 26
Chalk, C. C.....9317 Gratiot Ave., Detroit 13
Chall, Henry G.....2941 W. McNichols, Detroit 21
Chapin, Sidney E.....10149 Michigan Ave., Dearborn
Chapman, Aaron L.....2550 Atkinson, Detroit 6
Chapman, Paul T.....1151 Taylor Ave., Detroit 2
Chapman, Roland H.....7600 John R. St., Detroit 2
Chapnick, H. A.....506 Kales Bldg., Detroit
Charleston, R. A.....15174 Lasher Rd., Detroit 23
Charnas, Sidney.....542 Maccabees Bldg., Detroit 2
Chason, Jacob L.....1401 Rivard St., Detroit 7
Check, Frank E.....3439 Iroquois, Detroit 14
Chen, Mey-en.....1450 Pallister, Detroit 6
Chesluk, Herman M.....1312 David Broderick Tower, Detroit
Chester, William P.....5057 Woodward, Detroit 2
Childs, G. M.....2842 W. Grand Blvd., Detroit
Chipman, Willard A.....14300 W. McNichols Road, Detroit 35
Chittenden, George E.....7815 E. Jefferson Ave., Detroit 14
Chostner, G. C. (R).....2237 S. Atlantic Daytona Beach, Fla.
Chown, Marion.....2853 Biddle St., Wyandotte
Christopher, James G.....4777 East Outer Drive, Detroit
Chrouch, Laurence A.....18456 Grand River, Detroit 23
Church, A. S.....19570 Bretton Dr., Detroit
Cioffari, M. S.....19363 James Couzens Highway, Detroit
Ciprian, Joseph E.....1775 E. Grand Blvd., Detroit
Clapper, Muir.....1401 Rivard St., Detroit 26
Clark, Arthur M.....22400 Cherryhill, Dearborn
Clark, Charles J.....Ford Motor Co., Dearborn
Clark, Clarence M.....2605 Holbrook, Detroit 12
Clark, Harold E.....17198 Oak Drive, Detroit 21
Clark, Harry G.....14600 Greenfield, Detroit 27
Clark, William P.....1682 S. Fort St., Lincoln Park
Clarke, Charles N.....2501 West Grand Blvd., Detroit
Clarke, Norman E.....2501 W. Grand Blvd., Detroit 8
Clarke, Robert B.....1112 Kales Bldg., Detroit
Clifford, C. H.....10 Peterboro, Detroit 1
Clifford, G. O.....Wayne State Univ. Coll. Med., Detroit
Clifford, John Edward....910 David Broderick Tower, Detroit 26
Clifford, R. H.....2799 W. Grand Blvd., Detroit 2
Clifford, Thomas P.....1802 David Whitney Bldg., Detroit 26
Clippert, J. C. (E).....Dearborn Inn, Dearborn
Coan, Glenn L.....2336 Van Alstyne Blvd., Wyandotte
Coates, E. O., Jr.....Henry Ford Hospital, Detroit 2
Cobane, John H.....10 Peterboro, Detroit 1
Cochrane, Edgar G.....12805 Hamilton, Detroit 3
Cohen, H. Herbert....12700 W. 7 Mile Road, Detroit 21
Cohen, Lewis.....7441 W. Seven Mile Rd., Detroit 21
Cohen, M. F.....20242 Braile, Detroit 19

Cohn, Daniel E.....409 Fox Bldg., Detroit 1
Cohoe, Don A.....18916 Woodward, Detroit 3
Cole, F. H. (L).....1757 David Whitney Bldg., Detroit 26
Cole, James E.....344 Glendale, Detroit 4
Cole, Wyman C. C.....1077 Fisher Bldg., Detroit 2
Cole, Wyman C. C., Jr.....3001 West Grand Blvd., Detroit 2
Coleman, Margarete W.....58 W. Adams Ave., Detroit 26
Coleman, P. F.....30935 Plymouth Road, Livonia
Coleman, William G.....20526 Grand River, Redford 19
Collings, M. R.....9201 W. Outer Dr., Detroit 19
Collins, James E.....13103 W. Chicago, Detroit 29
Colville, J. M.....Henry Ford Hospital, Detroit 2
Colvin, Leslie T.....474 Fisher Bldg., Detroit 2
Colyer, Raymond G.....56 Rhode Island, Detroit 3
Comfort, Milton D.....28754 Seneca, Flat Rock
Comstock, Lawrence A.....P.O. Drawer L, Trenton
Comstock, S. E.....1477 Lochmoor Blvd., Grosse Pointe Woods 36
Condon, S. E...1477 Lochmoor Blvd., Grosse Pte. Woods
Conklin, E. M.....Wayne County General Hosp., Eloise
Conley, L. C. M.....99 Tuxedo, Detroit 3
Connelly, Richard C.....1645 David Whitney Bldg., Detroit 26
Connolly, Frank O.....13815 Puritan, Detroit 27
Connolly, P. J.....1317 David Whitney Bldg., Detroit 26
Connors, J. J.....3546 Trumbull, Detroit
Cook, James A.....2730 21st St., Wyandotte
Cook, James C.....5 Fairmount Ct., Dearborn
Cooksey, Warren B.....62 W. Kirby, Detroit
Cooper, Edmond L.....414 David Whitney Bldg., Detroit
Cooper, James B.....18145 Mack Ave., Detroit 24
Cooper, R. F.....817 David Whitney Bldg., Detroit 26
Cooper, Ralph Ruehl.....1515 David Whitney Bldg,. Detroit 26
Corbeille, Catherine.....1050 Fisher Bldg., Detroit
Coseglia, Robert P.....9901 Whittier Ave., Detroit 24
Costello, Russell T.....630 Fisher Bldg., Detroit 2
Cotant, John F.....8935 Fenkell, Detroit 21
Cotruro, Louis D.....3640 McDougall, Detroit 7
Cotton, Schuyler O.....2332 Carson Ave., Detroit 9
Coulter, William J.....5258 Chatsworth, Detroit 24
Courville, Charles J.....1202 Maccabees Bldg., Detroit 6
Cowan Wilfrid.....6135 Chalmers, Detroit 13
Cowen, Leon B.....1038 Maccabees Bldg., Detroit 2
Cowen, Robert L.....907 Mutual Bldg., Detroit 26
Coyle, J. E.....573 Fisher Bldg., Detroit 2
Coyne, Douglas Ruthven....7376 Grand River, Detroit 4
Crawford, E. D.....504 Doctors Bldg., Detroit 1
Crews, Thomas H.....772 Fisher Bldg., Detroit 2
Crockett, Ethelene J.....7263 American, Detroit 10
Croll, Leo J.....1326 Maccabees Bldg., Detroit 2
Croll, Maurice M.....1326 Maccabees Bldg., Detroit 2
Crook, Charles L.....13700 Woodward, Detroit 3
Cross, Harold E.....499 Sunningdale, Grosse Pointe Woods 30
Crossen, Robert J.....902 David Whitney Bldg., Detroit 26
Croushore, James E.....573 Fisher Bldg., Detroit 2
Cruikshank, Alexander (E).....7860 Van Dyke Place, Detroit 14
Cubberley, R. B.....1800 Tuxedo, Detroit 6
Curhans, J. H.....18709 Meyer Road, Detroit 21
Curtis, Frank E.....10 Peterboro, Detroit 1
Curtiss, William P.....3181 E. Jefferson, Detroit 7
Cushing, Russell G.....13424 Gratiot Ave., Detroit 5
Cusick, Paul L.....1108 Mutual Bldg., Detroit 26
Czuj, J. M.....17555 James Couzens, Detroit 35

Dale, Edward C.....28 W. Adams Ave., Detroit 26
Dale, Esther H.....1401 Rivard St., Detroit 26
Dale, Mark.....3340 E. Eight Mile Road, Detroit 34
Daly, E. T.....21714 Fenkell, Detroit 23
Danforth, J. C. Sr. (R).....20175 Mack Ave., Grosse Pointe Woods
Danforth, James C., Jr.....20175 Mack Ave., Grosse Pointe Woods
Danforth, Mortimer E. (E).....1311 Cadillac Blvd. Detroit 14
Danforth, Robert.....20175 Mack Ave., Detroit 36
Darling, Charles E.....673 Fisher Bldg., Detroit
Darling Milton A.....673 Fisher Bldg., Detroit 2
Darnley, J. D.....Henry Ford Hospital, Detroit 2
Darpin, Peter H.....6602 W. Fort St., Detroit 9
Davidson, David M.....1055 Fisher Bldg., Detroit 2
Davidson, H. H.....17111 Indiana Ave., Detroit 21
Davidson, Harry O.....Henry Ford Hospital, Detroit
Davies, T. S. (L).....15425 Kercheval, Grosse Pointe
Davies, Windsor S.....1302 Mutual Bldg., Detroit 26
Davis, W. N.....Wayne County Gen'l Hosp., Eloise
Dawson, W. A...304 Avenue B, S.E., Winter Haven, Fla.
Day, Andrew J.....710 David Whitney Bldg., Detroit
Day, J. Claude.....307 David Whitney Bldg., Detroit
Dean, C. R.....8811 Hamilton Ave., Detroit 2
DeBusk, R. W.....4160 John R. St., Detroit 1
Deering, Robert J.....1359 Champaign, Lincoln Park
Defever, C. R.....19787 Mack Ave., Detroit 36
DeGroat, Albert F.....10205 W. Outer Drive, Detroit 23
DeGuistino, Caesar.....1175 E. Grand Blvd., Detroit 11
DeJongh, Edwin....Diesel Eng. Div., General Motors Corp., 13400 W. Outer Drive, Detroit 23
Delaini, Stella M.....461 Fisher Bldg., Detroit 2
Delaney, James R.....1020 David Whitney Bldg., Detroit 26
DeLawrence, Betty J.....21576 Michigan, Dearborn
DeLawrence, Thomas (A).....Grace Hospital, Detroit
Del Giorno, T. E.....St. John's Hospital, Detroit
Demaray, John F.....15312 Burt Road, Detroit 23
Dennis, M. S.....751 S. Military Ave., Dearborn
DePonio, Sylvester A.....20249 Van Dyke, Detroit 12
Deresz, Alphonse R.....19444 Van Dyke, Detroit
Derleth, Paul E.....562 W. Oakridge, Ferndale
Derr, J. W.....702 Maccabees Bldg., Detroit
DeSmyter, George C.....15527 E. Warren, Detroit
de Spelder, Ray E.....2970 W. Grand Blvd., Detroit 11
Deuby, Owen J.....15105 W. Seven Mile Rd., Detroit 21
DeVault, Marion.....7431 Orchard, Dearborn
Devine, Herbert W.....22101 Moross Road, Detroit 24
Dibble, Harry F.....1313 David Whitney Bldg., Detroit 26
Diakow, Lilian M.....2853 Biddle, Wyandotte
Dickson, B. R.....337 W. Grand Blvd., Detroit 16
Dickson, Elias L.....7716 Oakland, Detroit 11
Dickson, F. S.....5119 Milford, Detroit
Dickson, Leon A.....5119 Milford, Detroit
Dickson, L. C., Jr.....Henry Ford Hospital, Detroit 2
Dickson, Mary D.....18424 Mack Ave., Grosse Pointe Farms 36
Diebel, Nelson W.....660 Cadieux, Detroit 30
Diekman, F. C.....15800 W. McNichols Rd., Detroit 35
Dieterich, G. C.....15800 W. McNichols, Detroit
Dietze, Margaret R.....861 Monroe, Dearborn
Dietzel, H. O.....1024 W. Seven Mile Road, Detroit
Dill, Hugh L.....16114 E. Warren, Detroit 24
Dill, J. Lewis.....18615 Birchcrest, Detroit 21
DiLoreto, Panfilo C.....285 Vincennes Place, Grosse Pointe Farms 36
DiMaso, G. J.....16545 E. Warren, Detroit 24
Dimond, George E.....861 Monroe Blvd., Dearborn
Disney, C. T.....3311 W. Chicago Blvd., Detroit 6
Dittmer, Edwin F.....18412 Mack Ave., Grosse Pointe Farms 30
Ditzler, J. W.....Henry Ford Hospital, Detroit 2
Dixon, Fred W.....530 N. Telegraph Road, Dearborn
Dixon, R. K.....1004 Maccabees Bldg., Detroit 2
Dixon, Ray S.....5001 Van Dyke Ave., Detroit 13
Dobkin, Joseph.....20247 Murray Hill, Detroit 35
Dodds, John C. (L).....1355 David Whitney Bldg., Detroit 26
Dodenhoff, Chas F.....791 E. Grand Blvd., Detroit 7
Dodrill, F. D.....1553 Woodward, Detroit
Doering, Wendell R.....968 Fisher Bldg., Detroit 2
Doerr, Louis E., Jr.....16401 Grand River, Detroit 27

Dolega, Stanley F.....10053 Gratiot Ave., Detroit
Dolgoff, Sidney.....7301 Schaefer, Dearborn
Domzalski, Casimer A.....5361 McDougall, Detroit 11
Domzalski, H. M.....15252 Gratiot, Detroit 5
Donald, Douglas.....7815 E. Jefferson, Detroit 14
Donelan, R. T.....Henry Ford Hospital, Detroit 2
Donovan, D. R.....8704 Grand River Ave., Detroit 4
Donovan, Eugene T.....13365 Michigan, Dearborn
Donovan, Richard S.....968 Fisher Bldg., Detroit 2
Doran, J. H.....15101 Plymouth Road, Detroit
Dorman, Jack.....Harper Hospital, Detroit
Dorsey, John M.....65 Moss St., Highland Park 3
Doty, Chester A. (L).....1735 David Whitney Bldg., Detroit 26
Doub, Howard P.....Henry Ford Hospital, Detroit
Dougherty, Edward A.....18241 W. McNichols, Detroit 19
Douglas, Clair L.....405 David Whitney Bldg., Detroit
Dovitz, Benj. W.....95 Martin Place, Detroit
Dowdle, Edward F.....2501 W. Grand Blvd., Detroit 8
Downer, Ira G.....8445 E. Jefferson Ave., Detroit
Downes, George O.....8007 Harper, Detroit 13
Drake, Ellet H.....Henry Ford Hospital, Detroit 2
Drake, J. J. (R)....8845 Marygrove Drive, Detroit 21
Draves, Edward F.....19647 Joy Road, Detroit 28
Drazek, Joseph A.....8600 W. McNichols Rd., Detroit 21
Drews, Robert S.....12500 Broadstreet, Detroit 4
Drinkaus, H. I., Lt. Col. MC (M).....7th Evac. Hosp., APO 34, c/o PM, New York, N. Y.
Droock, Victor.....10 Peterboro, Detroit 1
D'Sena, Dorothy.....35166 Michigan, Wayne
Dubin, Joseph J.....10401 W. Chicago Blvd., Detroit 4
Dubnove, Aaron.....2115 W. Grand Blvd., Detroit 8
DuBois, Paul W.....1708 David Broderick Tower, Detroit 26
Dubpernell, Martin S. (L)....4019 Gilbert, Detroit 10
Dubpernell, R. O.....18595 Grand River, Detroit 23
Dudek, J. J.....16401 Grand River, Detroit 27
Dumke, P. R.....Henry Ford Hospital, Detroit 2
Duncan, J. R. (M).....8633 John R. St., Detroit 1
Dundas, Edward M.....4700 Schlaff, Dearborn
Dunlap, Henry A.....7815 E. Jefferson Ave., Detroit 14
Dunlap, S. F.....9100 Oakland, Detroit 11
Dunn, Cornelius E.....18145 Mack Ave., Detroit
Dupler, Gerald.....10 Peterboro, Detroit 1
Durham, Everett.....904 S. Military, Dearborn
Durham, Robert.....Henry Ford Hospital, Detroit 2
Durocher, Edmund J. (L) 4158 W. Jefferson, Ecorse 18
Durocher, Raymond E.....4158 W. Jefferson, Ecorse
Dutcher, Dwight J.....18514 Mack Ave., Grosse Pointe Farms 36
Duwe, Frank A.....25296 Fenkell, Detroit
Dwaihy, Paul J.....14530 E. Warren, Detroit
Dwyer, Francis W.....7448 Linwood, Detroit
Dykema, Rosemary.....18424 Mack Ave., Detroit 36
Dziuba, John F.....18901 W. Warren, Detroit 28
Dzul, Paul.....275 W. Grand Blvd., Detroit 16
Eades, Charles C.....863 Fisher Bldg., Detroit 2
Eadie, G. A.....16083 Southampton, Livonia
Eakins, F. J. (R).....1768 Mortensen, Berkley
Easterly, Robert L.....2854 Biddle Ave., Wyandotte
Eaton, Crosby D.....462 Fisher Bldg., Detroit 2
Ebner, C. M.....22925 Colony, St. Clair Shores
Echt, R. J.....3320 W. Chicago, Detroit 6
Eckhous, Arthur W.....1015 Kales Bldg., Detroit
Eder, Samuel J.....1116 Maccabees Bldg., Detroit 2
Edgar, Irving I.....712 Maccabees Bldg., Detroit 2
Edmonds, Gerald W.....18425 Morang Drive, Detroit 5
Edmonds, Wm. N.....10 Peterboro, Detroit 1
Edmondson, Robert B.....18501 Mack Ave., Detroit 24
Edwards, G. L.....1841 Davison, Detroit 3
Eisman, Clarence H.....1121 Whittier Road, Grosse Pointe 6
Eldredge, Edward F.....18540 Mack Ave., Grosse Pointe 36
Elliott, R. N.....8100 E. Jefferson, Detroit 14
Elliott, William G.....4101 Fenkell, Detroit 21
Ellis, F. R.....1440 Venice Ave., Dearborn 8
Elman, Meyer J.....14002 Woodward, Detroit
Elson, Abraham.....22519 Plymouth, Detroit 28
Elvidge, Robert J.....2900 W. Grand Blvd., Detroit
Emmert, Herman C. (L).....7303 Grandmont, Detroit 10
Engel, E. H.....2336 Van Alstyne Blvd., Wyandotte
Engstrom, F. W.....Veteran's Adm. Hospital, Dearborn
Engstrom, R. M.....1777 Culver Ave., Dearborn
Eno, Laurel S.....1001 David Whitney Bldg., Detroit 26
Ensign, Dwight C.....Henry Ford Hospital, Detroit
Epstein, S. G.....6438 Van Dyke, Detroit 13
Erickson, Eldon W.....2900 S. Fort St., Detroit 26
Erkfitz, Arthur W.....545 David Whitney Bldg., Detroit 26
Erman, Joseph M.....9225 Grand River Ave., Detroit 4
Eschbach, J. W.....935 S. Military, Dearborn
Estabrook, Bert U. (L).....850 Virginia Park, Detroit 2
Ettinger, Clayton J. (L)....18734 Woodward, Detroit 3
Evans, E. W.....9025 Linwood, Detroit 6
Evans, G. P., Jr.....414 David Whitney Bldg., Detroit 26
Evans, Jos. M.....10500 E. Warren Ave., Detroit 13
Evans, Leland S.....20953 Grand River, Redford 19
Evans, W. A., Jr.....552 Fisher Bldg., Detroit 2
Evison, Emerson O.....Hq. 2nd Armored Div., APO 42, c/o PM New York, N. Y.
Ewing, C. H.....526 University Place, Detroit 30
Eyler, W. R.....Henry Ford Hospital, Detroit 2
Eyres, A. E.....567 Fisher Bldg., Detroit

Fachnie, H. L.....4741 Spokane, Detroit 4
Faello, S. J.....16840 E. Warren, Detroit 24
Fagin, I. Donald.....18254 Livernois, Detroit 21
Falick, Mordecai Louis.....960 Fisher Bldg., Detroit
Falk, Ira E.....7925 W. Vernor Highway, Detroit 9
Fallis, Lawrence S.....Henry Ford Hospital, Detroit 2
Fandrich, Theodore S.....1376 Lochmoor Blvd., Grosse Pointe 30
Farbman, Aaron A.....14515 Kercheval, Detroit 15
Farmer, W. L.....8633 John R., Detroit 2
Faunce, Sherman P.....8300 Kercheval, Detroit 14
Fea, J. F.....Mt. Carmel Mercy Hospital, Detroit
Felcyn, W. George....2901 West Grand Blvd., Detroit 8
Feld, David.....15101 W. McNichols Rd., Detroit 35
Feldkamp, Lee E.....585 Forest, Plymouth
Feldman, N. L.....17338 Woodingham, Detroit
Feldman, Paul H.....954 Maccabees Bldg., Detroit 2
Feldstein, M. Z. (A)....17765 Manderson Rd., Detroit 3
Fellers, Ray L.....6505 Grand River, Detroit 8
Fenech, Harold B.....324 Professional Bldg., Detroit
Fenner, William G.....12454 E. Outer Drive, Detroit 24
Fennessey, J. F...1551 David Whitney Bldg., Detroit 26
Fenton, Edwin H...15125 Grand River Ave., Detroit 27
Fenton, Meryl M.....8600 W. McNichols Road, Detroit
Fenton, Russell F...15125 Grand River Ave., Detroit 27
Fenton, Stanley C.....15310 E. Warren St., Detroit 24
Ferrara, Louis V.....13805 Parkgrove Ave., Detroit 5
Ferrara, Virginia M...18422 Woodward Ave., Detroit 3
Ferrell, Robert D. (M).....Southern Apts., 63-C, Fort Campbell, Ky.
Fettig, Carl A. (E).....1026 Harvard Rd., Grosse Pointe Park 30
Figiel, Leo S.....18700 Meyers Rd., Detroit 21
Figiel, S. J.....1429 David Whitney Bldg., Detroit 26
Fill, Leon.....1506 David Broderick Tower, Detroit
Finch, Alvis D.....17555 James Couzens, Detroit
Finch, F. Sinclair.....894 N. Renaud, Grosse Pointe Woods 36
Fine, Edward.....1112 Kales Bldg., Detroit 26
Fink, Samuel.....987 E. Jefferson, Detroit 7
Finkell, Lawrence J.....15231 W. Seven Mile Rd., Detroit 35
Finkelstein, J. H.....25447 Plymouth Road, Detroit 28
Finkelstein, Lionel....275 W. Grand Blvd., Detroit 16
Finkelstein, M. B.....17300 Schaefer Road, Detroit 35
Fischer, Frederick J.....205 Professional Bldg., Detroit 1
Fischhoff, Joseph.....18674 Fairchild, Detroit 2
Fishbein, Herbert 987 E. Jefferson, Detroit 7

Fisher, G. S.....1709 David Whitney Bldg., Detroit 26
Fisher, James M.....79 Kercheval, Grosse Pointe
Fisher, O. O. (L).....2475 Iroquois Ave., Detroit 14
Fisher, Ralph L.....8445 Jefferson, East Detroit
Fitzgerald, James M.....2536 W. Grand Blvd., Detroit 8
Flaherty, H. J.....15865 Wyoming, Detroit 21
Flaherty, N. W.....3677 Fort St., Lincoln Park
Fleming, Joseph L.....Henry Ford Hospital, Detroit 2
Flora, William Robert.....8100 E. Jefferson, Detroit 14
Flower, J. A.....14140 Puritan, Detroit 27
Foertsch, F. E.....3105 Chestnut St., Dearborn
Fogt, Herbert E.....11801 Morang, Detroit
Fogt, Robert G.....11801 Morang, Detroit
Folberg, Irving I.....862 W. McNichols Rd., Detroit 3
Foley, Hugh S.....22255 W. Michigan, Dearborn 23
Foley, Joseph M.....18550 Lancashire Road, Detroit 23
Font, Anthony J.....710 Kales Bldg., Detroit 26
Ford, George A. (L).....803 Mutual Bldg., Detroit 26
Fordell, F. S.....441 S. Oakwood, Lincoln Park 25
Forgrave, E. G.....18520 Grand River Ave., Detroit 23
Forrer, Gordon R.....21603 Grand River, Detroit
Foster, Daniel P. (A)....Henry Ford Hospital, Detroit 2
Foster, E. Bruce.....853 Fisher Bldg., Detroit 2
Foster, Owen C...1015 David Whitney Bldg., Detroit 26
Foster, Wallace M.....13700 Woodward Ave., Detroit 3
Foster, William L.....2567 W. Grand Blvd., Detroit 8
Fowler, Melvin E.....247 E. Warren, Detroit
Fox, Leonard (A).....258 Emmons Blvd., Wyandotte
Fox, Morris Edward.....10 Peterboro, Detroit 1
Fraiberg, Paul L.....13001 W. Chicago, Detroit 27
Frame, Boy.....Henry Ford Hospital, Detroit 2
France, C. J.....3401 Burns Ave., Detroit 14
Franjac, M. J.....25447 Plymouth Road, Detroit 28
Franke, A. T.....Henry Ford Hospital, Detroit 2
Franzen, Nils A.....19566 Grand River, Detroit 23
Frazer, Mary Margaret.....812 Kales Bldg., Detroit 26
Frederickson, G. C.....3919 John R., Detroit
Free, Harry W.....14300 W. Six Mile Road, Detroit 35
Freedman, John....4853 Second Blvd., at Warren Ave., Detroit 1
Freedman, Milton..18626 Santa Barbara St., Detroit 21
Freeman, D. K.....881 Chalmers, Detroit 15
Freeman, Mable.....1316 David Broderick Tower, Detroit 26
Freeman, Michael W.....401 David Whitney Bldg., Detroit 26
Freeman, Wilmer....940 E. Seven Mile Road, Detroit 3
Freid, Samuel.....17537 Parkside, Detroit 21
Freier, Morton L.....13051 Puritan Ave., Detroit 27
Freitas, E. L.....St. Johns Hospital, Detroit 24
Fremont, Joseph C.....1202 David Whitney Bldg., Detroit 26
Frey, James L.....755 David Whitney Bldg., Detroit 26
Friedlaender, Alex S.....10300 W. Seven Mile Road, Detroit 21
Friedlaender, Sidney.....10300 W. Seven Mile Road, Detroit 21
Friedman, David....2429 E. Milwaukee Ave., Detroit 11
Friedman, I. H.....3773 2nd Ave., Detroit 1
Friedman, Seymour.....2900 S. Fort, Detroit 17
Fritz, G. E.....St. John Hospital, 22101 Moross Road, Detroit 21
Fryfogle, James D.....655 Fisher Bldg., Detroit 2
Fulgenzi, Andrew A.....7445 Mack Ave., Detroit
Fuller, Hugh M.....1257 David Whitney Bldg., Detroit 26
Fulton, H. E., Jr.....110 Professional Bldg., Detroit 1
Fulton, William James.....3-204 General Motors Bldg., Detroit 2

Gaffney, J. M. (A).....13600 Ohio, Detroit 4
Gagliardi, C. A.....Lynn Hospital, Detroit 17
Gagliardi, Raymond A.....25750 W. Outer Drive, Lincoln Park
Gajewski, J. E.....Parke, Davis & Company, Detroit 32
Galantowicz, Henry C.....7433 Michigan, Detroit 10
Galdonyi, Laslo.....2311 David Broderick Tower, Detroit 26
Galdonyi, Nicholas L.....8001 W. Jefferson, Detroit 17
Galerneau, D. B.....7394 Engleman, Centerline
Galvin, P. P.....7416 Twelfth St., Detroit 6
Ganos, Thomas.....6525 Park, Allen Park
Ganschow, John H.....10025 Nadine, Huntington Woods
Gardner, Lawrence Wm.....18782 Glenwood Ave., Lathrup Village, Birmingham
Gardner, Max L.....812 Kales Bldg., Detroit
Gariepy, Louis B...16401 Grand River Ave., Detroit 27
Gass, H. Harvey.....815 Kales Bldg., Detroit
Gaston, Herbert B.....871 Fisher Bldg., Detroit 2
Gates, Nathaniel (L).....10 Peterboro, Detroit 1
Gaynor, Alex.....1435 E. Seven Mile Road, Detroit 3
Gehring, Harold W.....20211 Greenfield, Detroit 35
Geib, Ledru O. (L).....3528 Van Dyke St., Detroit 14
Geitz, William A.....7234 E. Forest Ave., Detroit 13
Gelbach, Philip D.....2900 S. Fort St., Detroit 25
Gellert, I. S. (L).....1229 David Whitney Bldg., Detroit 26
Gemeroy, J. C.....664 Fisher Bldg., Detroit 2
Geneczko, J. T.....Henry Ford Hospital, Detroit 2
Gerisch, Robert A. (M)....8 Hillside, Winchester, Mass.
Gerondale, Edmond J.....750 Fisher Bldg., Detroit 2
Gibson, Dunbar P. (A).....1098 E. Grand Blvd., Detroit 7
Giese, F. W.....18526 Schoolcraft, Detroit 23
Gigante, Nicola.....10 Peterboro, Detroit
Gigliotti, David.....Providence Hospital, Detroit
Gilbert, H. R.....13146 Phelps, Wyandotte
Gillard, James L.....13300 Livernois, Detroit
Gillespie, Stephen M.....1011 Haigh St., Dearborn
Gilpin, W. A.....4560 Niagara Lane, Route 1, Birmingham
Gimbel, N. S.....1401 Rivard, Detroit
Ginsberg, Harold I.....15344 W. McNichols Rd., Detroit 35
Gish, J. R.....Henry Ford Hospital, Detroit 2
Gitlin, Charles.....1610 Glendale St., Detroit 6
Gittins, Perry C.....732 Maccabees Bldg., Detroit 2
Givens, D. H.....3453 Charlevoix, Detroit 7
Gizynski, W. E.....15400 Edington Rd., Livonia
Glasgow, Gordon K.....1170 Harvard Road, Grosse Pointe 30
Glassman, Samuel (L).....60 W. Hancock, Detroit 1
Glazer, Walter S.....8600 W. McNichols Rd., Detroit 21
Glees, John L.....11631 Mack, Detroit
Glemet, Raymond B.....3314 Bagley, Detroit 16
Glowacki, B. F.....1144 Maccabees Bldg., Detroit 2
Godley, Alegro J.....18060 Conant, Detroit 34
Goerke, Elmer A.....3663 Goddard Road, Romulus
Goetz, Angus G.....710 David Whitney Bldg., Detroit 26
Goins, W. F.....6675 Tireman, Detroit 10
Goldberg, Arthur.....340 E. 8 Mile Road, Detroit 3
Goldberg, Harry H.....514 Fox Theater Bldg., Detroit 1
Goldberg, Nathan H...514 Fox Theater Bldg., Detroit 1
Golden, Alfred....26764 York Road, Huntington Woods
Goldfaden, Alfred.....8111 Navy, Detroit 9
Goldin, M. I.....632 Maccabees Bldg., Detroit 2
Goldman, Abe A.....19100 Manor, Detroit
Goldman, Aubrey.....909 Kales Bldg., Detroit 26
Goldman, Perry....15401 W. McNichols Rd., Detroit 35
Goldstein, Abe S.....18450 Northlawn, Detroit 21
Goldstein, Sidney.....14620 E. 7 Mile Rd., Detroit 5
Goldstone, R. R.....10 Peterboro, Detroit 1
Gollman, Maurice D.....918 Maccabees Bldg., Detroit 2
Gonne, William S...619 David Whitney Bldg., Detroit 26
Goodman, H. L. (M).....1415 Tuckerman, N.W., Apt. B-7, Washington, D. C.
Goodman, M. M.....22265 Garrison, Dearborn
Goodman, V. P.....3540 Somerset Ave., Detroit 24
Goodwin, W. W.....41001 Seven Mile Road, Northville
Gordon, John W. (R).....12700 Mendota, Detroit
Gordon, W. E., Jr. (M)..Box 122, 3750th USAF Hosp., Sheppard Air Base, Tex.
Gordon, William H.....1102 David Whitney Bldg., Detroit 26
Gorelick, Martin J.....23901 Michigan Ave., Dearborn
Gorning, Raymond P.....857 Marlborough, Detroit 15

Goryl, Stephen V.....9953 E. Forest, Detroit 13
Goss, Samuel B.....10 Peterboro, Detroit
Gostine, Edmond J.....9758 Chalmers Ave. at Longview Detroit
Gottlieb, Jacques S.....951 E. Lafayette, Detroit 7
Gottschalk, Fred W.....1314 Maccabees Bldg., Detroit 2
Goudie, F. D.....19001 W. Seven Mile Road, Detroit 19
Gould, S. E.....Wayne Co. General Hospital, Eloise
Gourley, E. V.....16901 James Couzens, Detroit
Goux, Raymond S.....545 David Whitney Bldg., Detroit 26
Grace, Joseph M.....17505 Parkside, Detroit
Grady, J. A.....946 Three Mile Drive, Grosse Pointe Park
Graham, J. A.....4102 Brush, Detroit 1
Graham, John G., Jr.....7815 E. Jefferson, Detroit 14
Grain, Gerald O.....Henry Ford Hospital, Detroit 2
Grajewski, Leo E.....2201 E. Jefferson Ave., Detroit 7
Gramley, William....13328 E. Jefferson Ave., Detroit 15
Granger, Francis L.....14160 Gratiot Ave., Detroit 5
Granger, G. R.....705 David Whitney Bldg., Detroit 26
Grant, A. H.....18024 Sorrento, Detroit 35
Grant, H. E. (L).....Lewiston
Gratton, Henri L.....1301 Kales Bldg., Detroit 26
Gravelle, Lawrence J.....1036 David Whitney Bldg., Detroit 26
Gray, Jacques Pierce.....8900 East Jefferson Ave., Detroit 14
Greek, Louis M.....12901 E. McNichols Rd., Detroit 5
Green, Ellis R.....5172 Scotten Ave., Detroit 10
Green, E. W.....Henry Ford Hospital, Detroit 2
Green, Lewis.....13000 Grand River, Detroit 27
Green, Louis M.....14636 E. Seven Mile Road, Detroit 5
Green, Nelson W.....15800 W. McNichols Road, Detroit 35
Green, W. E.....12851 E. Grand River Ave., Brighton
Greenberg, Jack R.....15743 W. 7 Mile Road, Detroit 19
Greenberg, J. J.....7441 W. 7 Mile Road, Detroit
Greenberg, M. Z.....9105 Van Dyke, Detroit
Greene, John B.....2730 Hastings St., Detroit 1
Greene, T. J.....2425 W. Boston Blvd., Detroit 6
Greenidge, Robert I.....4839 Beaubien St., Detroit 1
Greenlee, William Tate.....15053 Maddelein, Detroit 5
Greenslit, Frank S.....Veterans Adm. Hospital, Dearborn
Gregory, L. J.....15220 Collingham, Detroit
Greifenstein, F. E.....1401 Rivard Street, Detroit
Greiner, Bert A.....12410 Van Dyke, Detroit 34
Grekin, John N.....7441 W. 7 Mile Road, Detroit 21
Grier, Wm. H.....18060 Conant, Detroit 34
Griffin, Julian P.....17555 James Couzens, Detroit 35
Griffin, Robert J.....4900 Cadieux, Detroit 24
Griffith, A. J.....14049 Warwick Road, Detroit
Griffiths, Sidney.....15400 Plymouth Road, Detroit 27
Grimaldi, G. J.....2983 Seminole, Detroit
Grino, Antonio.....Veteran's Adm. Hospital, Dearborn
Grinstein, Alexander.....18466 Wildmere, Detroit 21
Grob, Otto.....20211 Greenfield Rd., Detroit 35
Gross, Louis.....18937 Van Dyke, Detroit
Grossman, Sol.....538 Maccabees Bldg., Detroit 2
Grotz, Genevieve A.....861 Monroe, Dearborn
Gudes, David S.....1080 Fisher Bldg., Detroit
Guerrero, Jose.....13535 Woodward, Detroit
Guidot, J. M.....16401 Grand River Ave., Detroit 27
Guimaraes, A. S.....7301 Schaefer Highway, Dearborn
Guinan, G. E.....31655 Plymouth Rd., Livonia
Gulick, Arthur E.....1429 David Whitney Building Detroit 26
Gunn, C. G.....21500 Oakwood Blvd., Dearborn
Gurdjian, E. S.....840 David Whitney Bldg., Detroit 26
Gurskis, Eugenia.....504 Kales Bldg., Detroit
Gutov, Benjamin R.....602 Maccabees Bldg., Detroit
Guyton, Jack S.....Henry Ford Hospital, Detroit 2

Hacker, Elaine M.....2201 E. Jefferson, Detroit
Hackleman, G. L. (A).....430 Pitsanuloke Rd., Bangkok, Thailand
Hadesman, Donald.....985 E. Jefferson, Detroit 7
Haefele, Leslie P.....29108 Ford Road, Garden City
Hafford, R. C.....Henry Ford Hospital, Detroit 2
Hagge, D. R.....641 David Whitney Bldg., Detroit 26
Haidostian, B. H.....18456 Grand River, Detroit 23
Haitinger, K. S.....327 Professional Bldg., Detroit
Haking, Leonard..14014 E. Seven Mile Road, Detroit 13
Hale, Arthur S.....1501 David Whitney Bldg., Detroit
Halekas, G. P.....21727 Mack, St. Clair Shores
Hall, A. H.....10 Peterboro, Detroit 1
Hall, E. Walter.....10 Peterboro, Detroit 1
Hall, James A. J.....28 W. Adams St., Detroit 26
Hall, Ralph E.....10 Peterboro, Detroit 1
Hall, Robert J.....6014 W. Fort St., Detroit 9
Hall, Winthrop D.....36200 Plymouth Rd., Livonia
Hallen, Leonard J.....14032 Ohio, Detroit
H'Amada, Norman K.....904 Maccabees Bldg., Detroit 2
Hamburg, Robert H.....1515 David Whitney Bldg., Detroit 26
Hamburger, A. C.....1512 David Broderick Tower, Detroit
Hamburger, S. W.....19270 Afton Rd., Detroit 3
Hamil, Brenton M.....Henry Ford Hospital, Detroit
Hamilton, Norman C.....300 W. McNichols Rd., Highland Park
Hamilton, Q. P.....1613 David Whitney Bldg., Detroit 26
Hamilton, William.....13836 Woodward Ave., Detroit 3
Hamilton, W. F. (L).....234 East Grand Blvd., Detroit 7
Hammer, Edwin J.....16616 Mack, Detroit 24
Hammer, Roy W.....16620 E. Warren, Detroit
Hammond, Arthur E.....1863 David Whitney Bldg., Detroit 26
Hammond, J. L. (L).....1911 Sunset Dr., R. I., Escondido, Calif.
Hand, Fordus V.....81 East Kirby, Detroit 2
Hank, E. J.....8261 Cheyene, Detroit 28
Hansen, Frederick E.....120 Glynn Court, Apt. 700, Detroit 2
Hanser, Joshua (L).....3000 Field Ave., Detroit 14
Hardstaff, R. John (L)..648 Neff Road, Grosse Pointe 30
Hardt, Barbara A.....Chrysler Corp., Lynch Road, Detroit 5
Harelik, E. W.....614 Maccabees Bldg., Detroit
Harkaway, Roman W.....19125 Van Dyke, Detroit 34
Harley, G. H.....21831 Willoway Rd., Dearborn
Harley, Louis M.....4100 W. McNichols Road, Detroit 21
Harm, Winfred B.....5884 West Vernor Highway, Detroit 9
Harmon, L. G. (M).....987 E. Jefferson, Detroit
Harmon, Walter.....2510 E. Davison, Detroit 12
Harper, Jesse T.....1248 David Whitney Bldg., Detroit 26
Harrell, Voss.....1035 Oakwood, Dearborn 7
Harrington, Frank L.....8935 Fenkell, Detroit 21
Harris, Arthur D. (M).....5262 Tireman, Detroit 4
Harris, Harold H.....8011 W. Vernor Highway, Detroit
Harris, Ivor David.....817 David Whitney Bldg., Detroit 26
Harris, L. C., Jr.....1401 Rivard, Detroit
Harrison, Wesley.....4847 Iroquois, Detroit 14
Harrison, Wm. L.....1110 Clairmont, Detroit 2
Hart, Charles E.....23845 Van Dyke, Centerline
Hart, John Clarence.....9341 Moffat, Detroit
Harten, James.....29 S. Fort St., Detroit 17
Hartkop, Henry H.....16321 Mack Ave., Detroit 24
Hartman, F. W.....Henry Ford Hospital, Detroit 2
Hartquist, R. J.....1495 Fort St., Wyandotte
Hartzell, John B.....7815 E. Jefferson Ave., Detroit 14
Hasley, Clyde K.....1429 David Whitney Bldg., Detroit 26
Hasley, Daniel E.....1401 Rivard St., Detroit 7
Hassig, W. W.....14504 Mack Ave., Detroit 15
Hastings, Orville J.....15744 Harper, Detroit 24
Hathaway, Hubert R.....230 Madison Ave., Detroit
Hause, Glen E.....18520 Grand River, Detroit 23
Hauser, I. Jerome.....7411 Third Ave., Detroit 2
Hauser, John E.....671 Fisher Bldg., Detroit 2
Havers, Howard.....1032 Maccabees Bldg., Detroit 2
Hawkins, James W.....14237 Greenfield, Detroit 27
Hayes, D. M.....713 David Whitney Bldg., Detroit 26
Hazen, Roy S.....20526 Grand River Ave., Detroit 23

Heath, Leonard P.....1457 David Whitney Bldg., Detroit 26
Heavner, Lyle E.....119 Kercheval, Detroit
Hecht, Manes S.....25622 Coolidge Hwy., Huntington Woods
Heenan, Theophilus H.....1409 David Whitney Bldg., Detroit 26
Heideman, Louis E.....20211 Greenfield, Detroit 35
Heldt, Richard F.....1951 Monroe, Dearborn
Heldt, Thomas J. (L).....Henry Ford Hospital, Detroit 2
Hellems, H. K.....319 Moross, Grosse Pointe Farms
Hendelman, Manuel H.....14350 Harper, Detroit 13
Henderson, A. B.....9041 Dexter, Detroit 6
Henderson, Arthur B.....10452 Mack, Detroit
Henderson, Charles W.....853 Fisher Bldg., Detroit
Henderson, Harold.....852 Fisher Bldg., Detroit 2
Henderson, H. W.....308 Professional Bldg., Detroit 1
Henderson, John C.....316 Chalfonte, Grosse Pte. Farms 36
Henderson, Leslie T.....14814 E. Warren, Detroit 15
Henderson, William E.....9341 Chalmers, Detroit 13
Hendry, H. W.....2716 Rochester, Detroit
Henig, Fred N.....7605 W. Seven Mile Road, Detroit 21
Henkin, Raymond.....3343 Fullerton, Detroit
Henkin, William A.....19166 James Couzens, Detroit 35
Henrich, Lawrence E.....2051 W. Grand Blvd., Detroit 8
Herbst, Harold B.....20482 Ardmore, Detroit 21
Herkimer, Dan R.....1802 Buckingham, Lincoln Park 25
Herrold, Rose E.....1277 E. Grand Blvd., Detroit 11
Herschelmann, Roy F.....3343 Gratiot Ave. at Mack, Detroit 7
Hertzler, Jack H.....752 Fisher Bldg., Detroit 2
Herwick, John T.....Henry Ford Hospital, Detroit 2
Hess, Murray W.....13732 Woodward Ave., Detroit 3
Hewitt, Leland V.....917 David Whitney Bldg., Detroit 26
Heyman, L. F.....19001 W. Seven Mile Road, Detroit 19
Heyner, Stanley A.....3424 Oakman Blvd., Detroit 4
Hickey, Joseph.....6004 W. Fort St., Detroit 9
Hicks, Fred.....7301 Schaefer Road, Dearborn
Higbee, Arthur L.....429 E. Grand Blvd., Detroit 7
Hileman, S. Lee.....4043 W. Jefferson, Ecorse
Hill, E. J., Jr.....1536 David Whitney Bldg., Detroit 26
Hill, Gerald (M).....Valley Forge Army Hospital, Phoenixville, Pa.
Hill, Welford T.....6303 Mack Avenue, Detroit
Hillenberg, Sidney J.....20215 W. Seven Mile Road, Detroit
Hillenbrand, Alfred E.....14321 Kercheval, Detroit 15
Hiller, Glenn I.....13700 Woodward Avenue, Detroit 3
Hiller, H. M.....987 E. Jefferson, Detroit 7
Hillier, Leland G.....18750 Woodward Avenue, Detroit 3
Hilton, W. E.....5013 Harding, Detroit 13
Hiratzka, Tomiharu.....1401 Rivard, Detroit
Hirsch, Lore.....22671 Garrison, Dearborn
Hirschfield, A. H.....829 Fisher Building, Detroit
Hirschman, L. J. (E).....2619 Munson Avenue, Traverse City
Hirt, Harry.....18975 Cherrylawn, Detroit 21
Hoagland, F. L.....1260 E. Grand Blvd., Detroit 11
Hoagland, Thomas V.....81 E. Kirby, Detroit
Hobbs, Donald V.....17357 Fenkell Ave., Detroit 27
Hobbs, F. I.....Henry Ford Hospital, Detroit 2
Hochman, Morton M.....16633 Plymouth, Detroit 27
Hodges, Jason.....1200 S. Oxford Road, Grosse Pointe Woods 30
Hodgkinson, C. P.....Henry Ford Hospital, Detroit
Hoffer, Thomas.....5825 Allen Rd., Allen Park
Hoffman, Edward A.....7615 W. Vernor Hwy., Detroit
Hoffman, E. S.....766 Fisher Bldg., Detroit 2
Hoffman, Henry A.....10015 E. Outer Drive, Detroit 24
Hoffman, Harry Y.....15085 E. Seven Mile Road, Detroit 5
Hoffman, Louis.....16801 Wyoming, Detroit 21
Hoffman, M. C., Capt., MC (M).....226 Fisher Road, Detroit 30
Hoffman, Martin H.....1311 David Whitney Bldg., Detroit 26
Hogikyan, Azat.....Herman Kiefer Hospital, Detroit 2
Holcomb, August A.....117 W. Wing St., Northville
Holdredge, Jean M.....972 Fisher Bldg., Detroit 2
Hollander, A. J.....8026 Michigan Ave., Detroit 10
Hollinger, F. W.....Henry Ford Hosp., Detroit 2
Hollis, Henry B.....6809 Sarina, Detroit 10
Holloway, H. R.....13203 Linwood, Detroit 38
Holloway, Janet L.....3919 John R. Street, Detroit 1
Holt, C. J., Jr.....1575 Faircourt, Grosse Pointe 36
Holt, Henry.....5050 Cass, Detroit
Honhart, Fred L. (L).....1405 Berkshire Road, Grosse Pointe 30
Hooker, L. T.....35550 Michigan, Wayne
Hookey, John A.....2918 Biddle, Wyandotte
Hooper, Norman L.....6 Port Drive, Detroit
Hoops, George B. (E).....754 Fisher Bldg., Detroit
Hopkins, J. E.....6381 W. Fort St., Detroit 9
Hopkins, Scovell.....636 Maccabees Bldg., Detroit 2
Hopkins, W. J.....Henry Ford Hospital, Detroit 2
Horkins, E. J.....14300 W. McNichols Rd., Detroit 35
Horkins, Harold A.....893 Lakewood, Detroit
Horn, R. C.....Henry Ford Hospital, Detroit 2
Horny, Hugo O.....11600 Whittier, Detroit 24
Horton, Reece H.....938 David Whitney Bldg., Detroit 26
Horvath, James J.....1337 David Whitney Bldg., Detroit 26
Horwitz, John B.....1208 David Broderick Tower, Detroit 26
Hotchkiss, Loris M.....33220 W. 7 Mile Road, Livonia
House, W. W.....10350 Twelfth St., Detroit 6
Howard, Austin Z.....825 David Whitney Bldg., Detroit 26
Howard, Philip J.....Henry Ford Hospital, Detroit 2
Howell, Bert F.....10800 Whittier, Detroit 24
Howell, James T.....Henry Ford Hospital, Detroit 2
Howes, Homer A.....1515 David Whitney Bldg., Detroit
Howes, Willard Boyden.....2305 Pinecrest Drive, Ferndale 20
Howlett, Howard T.....868 Fisher Bldg., Detroit 2
Hranchook, Michael.....5042 Haverhill, Detroit 24
Hromadko, Louis.....1075 Fisher Bldg., Detroit 21
Hubbard, John P.....14620 E. Seven Mile Rd., Detroit 5
Hubbard, Ralph G. (A).....14800 Prevost, Detroit 27
Huber, Phillip J.....10 Peterboro, Detroit
Hudson, J. Stewart.....17443 E. Jefferson Ave., Grosse Pointe
Hudson, William A.....602 David Whitney Bldg., Detroit 26
Huegli, Wilfred A.....290 Moross Rd., Grosse Pte. Farms 36
Hulick, A. G.....1800 Tuxedo, Detroit 6
Hull, LeRoy W.....1701 David Whitney Bldg., Detroit 26
Hume, H. R., Jr.....702 David Whitney Bldg., Detroit 26
Huminski, T. S.....19244 VanDyke, Detroit 34
Hummel, Arthur R.....8045 E. Jefferson, Detroit
Hunt, T. H.....19431 Van Dyke, Detroit 12
Hunt, Verne G.....723 David Whitney Bldg., Detroit 26
Hunter, B. H.....13341 Livernois, Detroit 4
Husband, Chas. W.....3810 Northwestern Ave., Detroit 6
Husband, R. C.....18715 Prairie, Detroit 21
Hutchins, M. Colton.....773 Fisher Bldg., Detroit 2
Hyatt, Jarvis M.....22340 Michigan, Dearborn
Hyde, Frederick W., Jr.....Grace Hospital, Detroit 1
Hyland, John R.....13030 Mack Ave., Detroit 15
Hyman, Samuel J.....27342 Michigan Avenue, Inkster

Iacobell, Peter H.....19300 Van Dyke, Detroit 34
Ice, G. T.....18060 Conant Street, Detroit 34
Igna, Eli J.....Henry Ford Hospital, Detroit 2
Irvin, Earle Albert.....Ford Motor Co., 3000 Schaefer Rd., Dearborn
Irwin, William A.....Providence Hospital, Detroit 8
Isaacson, Arthur.....2921 E. Davison Ave., Detroit 12
Isaacson, H. E.....15101 W. Seven Mile Road, Detroit
Iseri, Lloyd T. (M).....Wayne State University, Detroit
Israel, Barney B.....1424 Maccabees Bldg., Detroit
Israel, Joseph G.....870 Maccabees Bldg., Detroit 21
Israel, Kenneth.....1072 Maccabees Bldg., Detroit 2
Iwata, Herbert.....428 McKerchey Bldg., Detroit 11
Izner, S. M.....17500 Schaefer, Detroit 35

Jacobs, Arnold.....28671 Plymouth Road, Livonia
Jacobson, L. F.....14123 Riverview, Detroit 23
Jacobson, Samuel D.....2435 Oakman Blvd., Detroit 4
Jacobus, Wayne.....21461 Sloan Drive, Apt. 206, Harper Woods 36
Jaeger, Grove A.....1802 E. Grand Blvd., Detroit 11
Jaekel, C. N.....1086 E. Grand Blvd., Detroit 7
Jaffar, Donald J.....734 Maccabees Bldg., Detroit 2
Jaffe, J. L.....7465 Harper, Detroit 13
Jaffe, Jacob.....501 Fox Theater Bldg., Detroit 1
Jaffe, Louis.....1002 David Whitney Bldg., Detroit 26
Jahsman, William E.....Henry Ford Hospital, Detroit 2
Jamieson, Thomas J.....1310 Warwick, Lincoln Park
Janicki, Natalia J.....Wayne Co. General Hospital, Eloise
Jarre, Hans A.....Grace Hospital, Detroit
Jarsen, Frank J.....817 Beechmont, Dearborn
Jarvis, Harold F.....14110 Gratiot Avenue, Detroit
Jasion, Lawrence J.....11945 Payton Ave., Detroit
Jaynes, Richard V.....25296 Fenkell, Detroit
Jeffries, Benjamin.....1010 Harvard, Detroit 30
Jend, William, Jr.....1365 Cass Ave., Detroit 26
Jend, W. J. (L).....3598 Mitchell, Detroit 7
Jenkins, Elwood A.....514 Kales Building, Detroit
Jenkins, S. B. (M).....Wayne Co. Gen. Hosp., Eloise
Jennings, Charles G.....14827 E. Jefferson, Detroit 15
Jennings, Elmer R.....432 E. Hancock, Detroit
Jensen, V. W.....532 Lincoln Road, Grosse Pointe 30
Jentgen, Chas. J. (L)....22101 Moross Road, Detroit 24
Jeremias, Robert C.....13300 Livernois, Detroit 4
Jerius, D. H.....9437 Van Dyke, Detroit 13
Jewell, F. C.....7220 Gratiot Avenue, Detroit 13
Jewell, J. S.....751 S. Military, Dearborn
Jocz, M. W.....Chrysler Corp., 341 Massachusetts Ave., Detroit 31
Jodar, E. O.....15760 Mack, Detroit 24
Jodar, L. W. (A).....21741 Edmunton Drive, St. Clair Shores
John, Hubert R.....650 Maccabees Building, Detroit 2
Johnson, A. S.....816 David Whitney Bldg., Detroit 26
Johnson, Homer L.....Henry Ford Hospital, Detroit 2
Johnson, Ralph A.....7815 E. Jefferson, Detroit 14
Johnson, Thomas D.....20526 Grand River, Detroit
Johnson, Vernon P.....10445 Kercheval, Detroit 14
Johnson, Vincent C.....10 Peterboro, Detroit
Johnson, W. H. M.....7159 Michigan, Detroit 10
Johnston, Charles G.....1401 Rivard, Detroit
Johnston, E. V.....3919 John R, Detroit
Johnston, J. L. (A).....1950 W. McNichols Road, Detroit 3
Johnston, Joseph A.....Henry Ford Hospital, Detroit
Johnston, William E.....1071 Fisher Bldg., Detroit 21
Johnstone, B. I.....555 Fisher Bldg., Detroit 2
Joinville, E. V. (L).....1202 Mutual Bldg., Detroit 26
Jones, Adrian R.....15309 Mack Ave., Detroit 24
Jones, Edna M.....Maybury Sanatorium, Northville
Jones, Roy D.....10234 Puritan Avenue, Detroit 38
Jones, W. J.....2514 Biddle, Wyandotte
Joyce, Stanley J.....1078 Fisher Bldg., Detroit 2
Juliar, Benjamin.....4100 W. McNichols Rd., Detroit 21
Jury, Donald B.....18800 Woodward, Detroit 3

Kaine, H. D.....755 Fisher Bldg., Detroit 2
Kalayjian, Bernard S.....Womans Hospital, Detroit 1
Kalder, Ned Block....6071 W. Outer Drive, Detroit 35
Kalichman, Nathan.....532 Maccabees Bldg., Detroit 2
Kallenbach, R. W.....985 Suningale Drive, Inkster
Kallet, Herbert I.....944 Maccabees Bldg., Detroit 2
Kallet, Maerit.....8620 W. McNichols, Detroit 21
Kallman, David.....5725 Cass, Detroit 2
Kallman, Leo.....5725 Cass, Detroit 2
Kallman, R. Robert....2632 Woodward Ave., Room 202, Detroit 1
Kamil, R. S.....12901 West 7 Mile Rd., Detroit 21
Kamin, Louis E.....4642 Second Blvd., Detroit
Kaminski, Zeno L.....3504 24th St., Detroit 8
Kamperman, George A. (L).....1807 David Whitney Bldg., Detroit 26
Kamsler, M. A.....Henry Ford Hospital, Detroit 2
Kandel, R. F.....Henry Ford Hospital, Detroit 2
Kane, A. V.....Providence Hospital, Detroit 8
Kanter, Herman....13127 West 7 Mile Road, Detroit 21
Kapetansky, A. J.....1728 Clairmont, Detroit 6
Kapetansky, N. J.....4790 W. Fort St., Detroit 9
Kaplita, Walter A.....5087 Caniff, Detroit 12
Karch, Saul.....12805 Broadstreet, Detroit 4
Kasabach, Harry Y.....952 David Whitney Bldg., Detroit 26
Kasabach, V. Y.....523 Book Tower Building, Detroit 26
Kashtan, H. A.....1410 David Broderick Tower, Detroit 26
Kasper, Joseph A.....Bon Secour Hospital, Grosse Pointe 30
Kaspor, Albert J.....16715 Harper Ave., Detroit
Kass, Arnold.....1316 David Stott Bldg., Detroit
Katz, Lawrence.....987 E. Jefferson, Detroit 7
Katzman, I. S.....412 Fox Theater Bldg., Detroit 1
Kaufman, J. M.....618 David Whitney Bldg., Detroit
Kaufman, L. W.....19467 Livernois, Detroit 21
Kaump, Donald H.....Providence Hospital, Detroit 8
Kauppinen, J. A.....15400 Plymouth Road, Detroit 27
Kawecki, Lucian.....3245 E. Jefferson, Detroit 7
Kazdan, Morris.....15024 McLain, Allen Park
Keating, Thomas F. (L)....20936 Grand River, Detroit
Kehoe, Henry J.....15252 Gratiot, Detroit 5
Keig, W. P., Jr.....2900 S. Fort St., Detroit 17
Keim, H. L.....1110 David Broderick Tower, Detroit 26
Keith, Kelly.....106 West Davison, Detroit 3
Keith, Rachel Boone.....18060 Conant, Detroit 34
Kelley, Frank James.....3919 John R. Street, Detroit
Kelly, E. W., Jr.....156 Harmon, Detroit 2
Kelly, J. J.....21124 Goddard Road, Dearborn
Kelmenson, Victor A.....7356 12th St., Detroit 6
Kelson, Malcolm J.....1045 Harvard, Grosse Pointe 30
Kemler, Walter J.....4045 W. Jefferson, Ecorse 18
Kennary, James M.....4900 Cadieux Road, Detroit
Kennedy, Chas. S.....10 Peterboro, Detroit 1
Kennedy, Donald J.....2730 E. Jefferson, Detroit 7
Kennedy, R. B. (R)....8900 E. Jefferson Ave., Apt. 1228, Detroit 14
Kenney, L. J.....Henry Ford Hospital, Detroit 2
Kenning, John C. (A)....6044 Waverly, La Jolla, Calif.
Kenfield, Wm. J.....35084 Chestnut St., Wayne
Kennison, Warren S.....15800 W. McNichols Rd., Detroit 35
Kernick, M. O.....13700 Woodward Avenue, Detroit
Kernkamp, Ralph F.....1204 David Broderick Tower, Detroit
Kersten, Werner (A).....3100 Gratiot, Detroit 7
Kerzman, Joseph H.....850 Maccabees Bldg., Detroit 2
Keshishian, Sarkis K.....13544 Woodward Ave., Detroit 3
Kessler, Charles....15105 W. Seven Mile Road, Detroit 35
Keyes, Eugene Charles.....4840 Maple St., Dearborn
Keyes, John W.....Henry Ford Hospital, Detroit
Killins, C. G.....8100 E. Jefferson, Detroit
Kimberlin, Kenneth K.....11110 Morang Drive at Balfour, Detroit 24
King, Edward D.....5455 W. Vernor Highway, Detroit 9
King, Melbourne J.....5455 W. Vernor Highway, Detroit 9
Kingsley, J. W., Jr.....2201 E. Jefferson, Detroit 7
Kingswood, Roy C.....90 E. Warren Ave., Detroit 1
Kinsley, George.....909 Kales Building, Detroit
Kirschbaum, H. M.....528 Maccabees Bldg., Detroit 2
Kirtland, William B.....2201 E. Jefferson, Detroit 7
Kitzmiller, John L.....15800 W. McNichols Road, Detroit 35
Klein, Herman.....14825 W. McNichols, Detroit 35
Klein, Howard A.....1838 David Whitney Bldg., Detroit
Klein, Sander P.....14825 W. McNichols Rd., Detroit 21
Klein, Wm.....21505 John R. Street, Hazel Park
Kleinman, Shmarya....16861 Wyoming Ave., Detroit 21
Kliger, David.....7756 Southfield, Detroit 10
Klokke, Karl.....12200 E. Jefferson, Detroit 15
Klosowski, Joseph.....8222 E. Outer Drive, Detroit
Knaggs, Charles W. (L).....12244 Gratiot, Detroit 5
Knaggs, Earl J.....3164 Biddle, Wyandotte
Knapp, Byron S.....10909 W. Jefferson, River Rouge 18

Knapp, Floyd B.....16565 Birwood, Detroit 21
Knapp, G. R.....22903 Gratiot, East Detroit
Knapp, W. L.....106 West Davison, Highland Park 3
Knighton, R. S.....27486 Lathrup, Birmingham
Knights, E. M., Jr.....Harper Hospital, Detroit
Knobloch, Edmund J.....5933 Chene, Detroit 11
Knoch, Hubert S.....14149 E. Jefferson, Detroit 15
Knox, Ross M.....9 Salliotte, Ecorse
Kobernick, S. D.....6767 W. Outer Drive, Detroit 35
Kobrak, Heinrich.....1419 David Whitney Bldg., Detroit 26
Koch, J. C.....1053 Iroquois, Detroit 14
Koebel, R. H.....14504 Mack Avenue, Detroit 24
Koerber, Edward J.....4876 Lakeview Ave., Detroit 13
Kogut, C. S.....10627 Puritan, Detroit
Kokowicz, Raymond J.....1056 Maccabees Bldg., Detroit 2
Kolman, I. I.....987 E. Jefferson, Detroit 7
Kopel, Joseph O.....10 Peterboro, Detroit 11
Koran, V. L.....972 Maccabees Bldg., Detroit 2
Koren, Louis....1214 Griswold St., Rm. 610, Detroit 26
Korum, L. W.....18585 E. Warren, Detroit
Koschnitzke, Herman K.....1221 Lincoln Street, Lincoln Park
Kossayda, Adam W.....5605 Michigan Ave., Detroit 10
Kovach, E. P.....14149 E. Jefferson, Detroit 15
Kovan, D. D.....16965 Hamilton, Highland Park
Koven, Abraham.....614 Professional Bldg., Detroit 1
Kowaleski, J. J.....9646 Vine, Allen Park
Kozlinski, Anthony E.....2195 E. Grand Blvd., Detroit 11
Krabbenhoft, Kenneth.....Harper Hospital, Detroit 1
Kraft, Raymond B.....12408 Van Dyke, Detroit 34
Kraft, Ruth M.....972 Fisher Bldg., Detroit 2
Krakauer, Bernard.....20211 Greenfield, Detroit 35
Krass, Edward W.....11088 Gratiot Ave., Detroit 5
Kraus, John J.....16840 E. Warren, Detroit
Krebs, William T.....16419 E. Warren, Detroit 24
Kreinbring, George E.....4229 Mt. Elliott, Detroit 14
Krenz, M. P.....Ford Motor Company, Dearborn
Kretzschmar, John C.....535 E. Grand Blvd., Detroit 7
Krevsky, D. A.....2015 Fort St., Lincoln Park
Krevsky, Seymour.....2015 Fort St., Lincoln Park
Krieg, Earl G. M.....1842 David Whitney Bldg., Detroit 26
Krieger, Harley L.....11390 Strathmoor, Detroit 27
Kritchman, M. J.....2314 David Broderick Tower, Detroit 26
Kroha, Lawrence A.....15124 Kercheval, Detroit 30
Kroll, H. V.....7815 E. Jefferson, Detroit 14
Krynicki, F. X.....13300 W. McNichols Rd., Detroit 35
Krystal, Henry....Detroit Receiving Hospital, Detroit 26
Kubanek, Joseph L.....23134 Myrtle St., Dearborn
Kucmierz, Francis S.....12181 Joseph Campau, Detroit 12
Kuhn, Albert Arthur.....90 E. Warren, Detroit 1
Kuhn, Richard F.....1700 Junction, Detroit 9
Kujawski, Walter.....16840 E. Warren, Detroit 24
Kulaski, C. H.....9309 Joseph Campau, Detroit 12
Kullman, Harold J. F.....Veterans Administration Hospital, Dearborn
Kurcz, Joseph A.....7433 Michigan, Detroit 10
Kurnetz, Ruben.....18200 Wyoming, Detroit 21
Kurtz, Harry C.....833 Barrington Road, Grosse Pointe Park 30
Kurtz, I. J. 503 Fox Building, Detroit 1
Kutsche, John D.....2057 W. Jefferson, Trenton
Kwasiborski, Stanley A.....2300 Oak Street, Wyandotte
Kyprie, H. M.....414 Kales Building, Detroit

LaBerge, James M.....100 Oak Street, Wyandotte
LaBine, A. C.....8-259 General Motors Bldg., Detroit 2
Lackey, L. S.....525 Visger, Ecorse
Laderach, D. C.....1217 David Whitney Bldg., Detroit 26
La Ferte, Alfred D.....1401 David Whitney Bldg., Detroit 26
LaHood, M. J.....17555 James Couzens, Detroit 35
Laige, R. J.....7900 Joseph Campau, Detroit 11
Lake, R. C.....275 McKinley, Detroit 36
Lakoff, C. B.....10234 W. Seven Mile Rd., Detroit 21
Lam, Conrad R.....Henry Ford Hospital, Detroit 2
Lamberson, Frank A.....19001 Grand River, Detroit 23
Lammy, James V.....644 Maccabees Bldg., Detroit 2
Lampman, H. H.....675 Fisher Bldg., Detroit 2
Landers, M. B.....275 W. Grand Blvd., Detroit 16
Lang, E. F.....Harper Hospital, Detroit
Lange, William A.....3919 John R., Detroit
Langston, J. D.....1420 St. Antoine, Detroit 26
Laning, George M. (L).....1217 David Whitney Bldg., Detroit 26
Lansky, Mandell.....14427 Mack Avenue, Detroit
Large, A. M.....1036 David Whitney Bldg., Detroit 26
Larkin, D. R.....27309 Plymouth Rd., Detroit 28
Larned, Richard I.....14182 Gratiot, Detroit
Larsen, R. D.....1405 Kales Bldg., Detroit 26
Larson, C. J.....12820 Ward, Wyandotte
Larson, Francine (A).....12820 Ward, Wyandotte
Larsson, Bror H. (L).....3919 John R Street, Detroit
Lasichak, Andrew G.....908 Kales Bldg., Detroit
Lasley, James William....1026 Maccabees Bldg., Detroit 2
Lathrop, P. L.....618 Gladstone, Detroit 2
Latimer, F. R.....1206 Mutual Bldg., Detroit 26
Latteier, K. K.....10 Peterboro, Detroit 1
Lauppe, Edward H.....1650 David Whitney Bldg., Detroit 26
Lauppe, Frederick A.....1801 David Whitney Bldg., Detroit 26
Laupus, W. E.....25750 Outer Drive, Lincoln Park
Laurisin, Eugene.....9545 Grand River Ave., Detroit
Lawhead, N. R.....7348 Kercheval, Detroit 14
Lawrence, L. F.....17300 Schaefer, Detroit 35
Lawson, John W.....18456 Grand River Ave., Detroit 23
Lazar, Morton R.....7401 Third Avenue, Detroit 2
Leach, David.....865 Fisher Bldg., Detroit 2
Leach, R. B.....1401 Rivard, Detroit 7
Leacock, R. C.....10619 E. Jefferson, Detroit
Leader, Luther R.....1129 David Whitney Bldg., Detroit 26
Leaver, L. Ross.....757 Lakewood, Detroit 15
Lebamoff, Alexander T.....6586 Allen, Allen Park
Lechner, M. S.....15074 Houston-Whittier, Detroit 5
Leckie, George C.....1355 David Whitney Bldg., Detroit 26
Lecklider, A. F.....Fisher Body Division, GMC General Offices, Detroit 2
Lee, Harry E.....13616 Gratiot Avenue, Detroit 5
Lee, L. E., Jr.....Wayne County General Hosp., Eloise
LeGallee, George M.....15921 W. Seven Mile Road, Detroit 35
Leibinger, Henry R.....511 Barrington Road, Grosse Pointe
Leipsitz, Louis S.....3566 Cass, Detroit 1
Leiser, Rudolf.....20265 Audette, Dearborn
Leiter, Forrest C.....22375 W. Garrison, Dearborn
Leithauser, D. J.....14540 E. Warren, Detroit
Leland, Solomon.....6563 Grand River, Detroit 8
Lemley, Clark F.....553 Fisher Bldg., Detroit 2
Lemmer, J. A., Jr.....9300 Mack Avenue, Detroit
Lemmon, Charles E.....1337 David Whitney Bldg., Detroit 26
Lemon, Bruce K.....1202 Maccabees Bldg., Detroit 2
Lentine, James J.....3485 Audubon, Detroit
Lenz, Willard R.....418 Moran Road, Grosse Pointe 30
Lepard, C. W.....1025 David Whitney Bldg., Detroit 26
Lepley, Fred O.....13302 Kercheval, Detroit 15
Lerman, S. E.....23700 Van Dyke, Van Dyke
Lerman, Samuel I.....4400 Livernois, Detroit
Lerner, L. H.....16901 W. McNichols, Detroit 35
Lesesne, J. M.....17700 Mack Ave., Grosse Pointe
L'Esperance, Simon P. (R)....Route 3, Woodslee, Ontario
Lessem, David.....19945 Prevost, Detroit 19
Leszynski, J. S.....517 Professional Building, Detroit 1
Leucutia, Traian.....10 Peterboro, Detroit
Levagood, Floyd B.....10 Peterboro, Detroit
Levant, Arthur B.....15715 E. Warren, Detroit
Levenson, M. L.....24554 Van Rensselaer, Oak Park
Leventer, Ira.....2950 South Fort St., Detroit 17
Levin, D. M.....15121 W. McNichols, Detroit 35

Levin, Herbert G.....17300 Schaefer, Detroit
Levin, M. M.....616 Maccabees Bldg., Detroit 2
Levin, Samuel J.....469 Fisher Bldg., Detroit 2
Levine, E. E.....8233 W. Chicago, Detroit 4
Levine, S. S.....8233 W. Chicago, Detroit
Levitt, Edward J.....840 Maccabees Bldg., Detroit 2
Levitt, Irving.....19214 Santa Barabara, Detroit
Levitt, Nathan.....607 Kales Bldg., Detroit
Levy, David B.....13003 Santa Clara, Detroit 35
Levy, Marvin B.....13906 Woodward, Detroit 3
Levy, S. H.....7441 W. Seven Mile Rd., Detroit 21
Lewin, Harry.....2457 Woodward Ave., Suite 702, Detroit 1
Lewis, Charles T.....5050 Joy Road, Detroit 4
Lewis, H. A.....Ford Motor Company, Dearborn
Lewis, J. Hugh.....2956 Biddle, Wyandotte
Lewis, L. A.....2730 E. Jefferson, Detroit 7
Lewis, Wilfred John.....404 Professional Bldg., Detroit 1
Libbrecht, Robert V.....6540 Park, Allen Park
Lichter, M. L.....2900 Oakwood, Melvindale 25
Lichtwardt, Hartman A.....432 Hancock Avenue, East, Detroit
Liddicoat, A. G.....20125 Fenkell, Detroit 23
Lieberman, B. L.....19212 Woodward Ave., Detroit
Lightbody, James J.....501 David Whitney Bldg., Detroit 26
Lignell, Rudolph W.....16259 James Couzens Hwy., Detroit
Lilly, C. J.....16649 Princeton, Detroit 21
Lincoln, A. R.....15300 Kercheval, Detroit 30
Linkner, Leonard S.....738 Maccabees Building, Detroit 2
Lipinski, Stanley L.....7540 Michigan Ave., Detroit 10
Lipkin, Ezra.....5715 Michigan Ave., Detroit 10
Lipnik, C. E.....31619 Plymouth, Livonia
Lipnik, M. J.....15439 Harper, Detroit 24
Lipschutz, Louis S.....1214 Griswold, Detroit 26
Lipson, C. T.....Detroit Receiving Hosp., Detroit 26
Lipson, Madeleine L.....7401 Third Avenue, Detroit 2
Lipton, Raymond F.....10 Peterboro, Detroit 1
Litsky, Abraham D.....1183 E. Grand Blvd., Detroit 11
Little James, W.....Mt. Carmel Mercy Hospital, Detroit
Livingood, Clarence.....Henry Ford Hospital, Detroit 2
Lockhart, E. C.....4724 Tireman, Detroit 4
Lockwood, Bruce C.....723 David Whitney Bldg., Detroit 26
Lofstrom, James E.....1420 St. Antoine, Detroit 26
London, Sol.....987 E. Jefferson, Detroit 7
Long, Earle C.....2626 Rochester, Detroit 6
Long, John J.....12421 Monica, Detroit 4
Longo, Salvatore.....Detroit Memorial Hosp., Detroit
Longyear, Harold W.....3019 N. Woodward, Royal Oak
Lookanoff, Victor A.....Highland Park General Hospital, Detroit 3
Loranger, C. B.....20825 Mack, Detroit
Loranger, G. L.....34 Moross Road, Grosse Pointe Farms 36
Lorber, J. H.....16558 Northlawn Avenue, Detroit 21
Lorentzen, Edwin H.....11702 Grand River, Detroit 4
Lovas, W. S.....6354 W. Fort, Detroit 9
Love, W. Thomas.....231 E. Warren, Detroit 1
Lowe, Adolf W.....17117 Parkside, Detroit 21
Lowe, Townsend G.....9430 Oakland, Detroit 11
Lowrie, William L., Jr.....Henry Ford Hospital, Detroit 2
Lowry, George L.....11601 E. Jefferson, Detroit 14
Lublin, Anna.....18412 Mack Avenue, Detroit 24
Luby, E. D.....730 Maccabees Bldg., Detroit 2
Lukas, John R.....19212 W. Warren, Detroit 28
Lumpkin, John G., Jr.....243 East Warren, Detroit
Lutes, B. B.....944 Maccabees Bldg., Detroit 2
Lutz, Earl F.....13-204 General Motors Bldg., Detroit 2
Lutz, S. J.....1020 Maccabees Bldg., Detroit 2
Luzarde, J. H.....18101 E. Warren Ave., Detroit 24
Lynn, David H.....2900 S. Fort St., Detroit 25
Lynn, Harvey D.....2900 South Fort St., Detroit 25
Lyons, William Harrington.....1012 Kales Bldg., Detroit 26
Lytle, Robert P.....411 Professional Building, Detroit 1

Maben, Hayward C., Jr.....9342 Oakland, Detroit 11
Mabley, J. Donald.....1139 David Whitney Bldg., Detroit 26
MacArthur, Robert A. (A).....95 Martin Place, Detroit 1
MacCracken, Frances L.....3752 Gladstone, Detroit 6
MacDougall, O. P.....13700 Woodward, Detroit
MacFarlane, Howard W.....1105 David Whitney Bldg., Detroit 26
MacGregor, William W.....6320 West Surrey-Foxcroft, Birmingham
Mack, Harold C.....955 Fisher Bldg., Detroit 2
MacKenzie, Earle D.....81 E. Kirby, Detroit
MacKenzie, Edward P.....430 University Place, Grosse Pointe
MacKenzie, Frank M. (R).....Box 326, c/o Mr. Tims, Sarnia, Ontario
MacKenzie, John W.....289 Rivard Blvd., Grosse Pointe 30
Mackersie, W. G.....18205 Roselawn, Detroit 21
Mackey, G. S.....Henry Ford Hospital, Detroit 2
MacMillan, Francis B.....920 David Whitney Bldg., Detroit 26
MacMullen, Frank F. (R).....615 North Drive, Marshall
MacPherson, K. C.....8100 E. Jefferson, Detroit 2
MacQueen, Malcolm D.....1654 1st National Bank Bldg., Detroit 26
Maczewski, John E.....9535 Jos. Campau, Detroit 12
Maddock, W. O. (M).....Wayne State Univ. College of Medicine, Detroit
Magnell, Ralph C.....8825 Puritan, Detroit
Maguire, Clarence E.....536 David Whitney Bldg., Detroit 26
Mahlin, M. S.....95 Martin Place, Detroit 1
Mahoney, Hugh M.....214 David Whitney Building, Detroit
Maibauer, Frederick P.....2966 Biddle, Wyandotte
Maino, Linus J.....2501 W. Grand Blvd., Detroit 8
Mainwaring, Rosser L.....1910 Russell, Dearborn
Maire, Edward D.....15224 E. Jefferson, Grosse Pointe
Maitland, Ruth J.....Mich. Bell Telephone Co., Detroit
Maizoub, Ahmad J.....3334 Fort St., Lincoln Park
Malachowski, B. T.....2501 W. Grand Blvd., Detroit 8
Malik, Edward A.....11302 Chalmers, Detroit 5
Malik, Nur M. (A).....Holy Family Hospital, Rawalpindi, Pakistan, India
Malina, Stephen.....1601 Kirkway Drive, Rte. #3, Bloomfield Hills
Malone, J. M.....17555 James Couzens Hwy., Detroit 35
Malone, Richard S. (M).....7424th USAF Hospital, APO 132, New York, N. Y.
Maloney, John A.....1338 Maccabees Bldg., Detroit 2
Maltzer, Joseph H.....950 E. State Fair, Detroit 3
Mancuso, Vincent S.....962 E. Grand Blvd., Detroit 7
Mandiberg, Jack N.....12700 W. 7 Mile Road, Detroit
Mann, Andrew D.....16715 Harper, Detroit 24
Maning, Morey H.....950 E. State Fair, Detroit
Manz, Howard N. (A).....Highland Park Gen'l Hospital, Detroit 3
Mapletoft, Kenneth E.....3545 Syracuse, Dearborn
Marcotte, Oliver J.....2890 W. Grand Blvd., Detroit 2
Marecki, V. J.....7068 Michigan Avenue, Detroit 10
Margules, S. Z.....3605 Third, Detroit 1
Margulis, R. R.....566 Fisher Bldg., Detroit 2
Marinus, Carleton J.....303 David Whitney Bldg., Detroit 26
Mark, Hansi.....21934 Stephenson, Hazel Park
Mark, Jerome.....903 Kales Bldg., Detroit 26
Markey, A. P.....14853 Michigan Ave., Dearborn
Markey, Frank R.....14853 Michigan, Dearborn
Markoe, Rupert C. L.....4102 Brush Street, Detroit 1
Marks, Ben.....902 Industrial Bank Bldg., Detroit 26
Marks, Bert W.....8250 Lincoln Drive, Huntington Woods
Marks, Morris H.....8233 W. Chicago, Detroit 4
Marsh, Alton R.....1218 Maccabees Bldg., Detroit 2
Marshall, James R.....14528 E. Jefferson, Detroit 15
Martin, Elbert A. (L).....1151 David Whitney Bldg., Detroit 26
Martin, F. A.....801 David Whitney Bldg., Detroit 26
Martin, J. B., Jr.....449 E. Elizabeth, Detroit 1

Martin, L. R.....2000 Second Blvd., Detroit 26
Martin, M. T.....Suite 121, 8900 E. Jefferson Ave., Detroit 14
Martin, Peter A.....17185 Muirland, Detroit 21
Martin, Wilbur C.....7440 W. Jefferson, Detroit 17
Martineau, P. C. (M)....Fourth Army Medical Lab., Brooke Army Medical Center, Fort Sam Houston, Texas
Martinez, Pedro O.....1439 Bagley, Detroit 16
Martmer, Edgar E.....526 Professional Bldg., Detroit
Marwil, T. B.....16965 Hamilton, Highland Park
Mason, P. W.....13311 E. Jefferson, Detroit 15
Mateer, John G.....Henry Ford Hospital, Detroit 2
Mattman, Paul E.....1500 Seminole, Detroit 14
Mattson, Theodore.....3919 John R, Detroit
Maun, Mark E.....1551 David Whitney Building, Detroit
Mauthe, H. G.....9272 Idaho, Livonia
Maxwell, J. Harvey.....2415 W. Grand Blvd., Detroit 2
May, Frederick T.....608 Kales Bldg., Detroit 26
Mayer, E. V.....16525 Woodward Ave., Detroit 3
Mayer, Willard D.....51 W. Boston Blvd., Detroit
Maynard, F. M.....6828 Park, Allen Park
McAlonan, William T.....10 Peterboro, Detroit 1
McAlpine, Gordon S.....658 Fisher Bldg., Detroit 2
McBryan, T. J.....Grace Hospital, Detroit 1
McCadie, James.....13700 Woodward, Detroit 3
McCandless, Virginia.....15850 E. Warren, Detroit 24
McCaughey, R. S. (M)....Receiving Hospital, Detroit 26
McClaughry, R. I.....16526 Princeton St., Detroit 21
McClelland, Rachel.....33026 Five Mile Road, Livonia
McClellan, Robert J., Sr. (L)....906 Michigan Theatre Bldg., Detroit 26
McClellan, Robert J., II.....906-8 Michigan Theatre Building, Detroit
McClendon, James J.....503 E. Warren Avenue, Detroit 1
McClintock, J. J.....16151 Schoolcraft, Detroit 27
McClure, Robert W.....1306 David Whitney Bldg., Detroit 26
McClure, William R.....954 Fisher Bldg., Detroit 2
McColl, Charles W.....2826 Biddle, Wyandotte
McColl, Clarke M.....Henry Ford Hospital, Detroit 2
McColl, K. M.....20323 Mack Avenue, Grosse Pointe Woods 36
McCollum, E. B.....761 David Whitney Bldg., Detroit 14
McCord, Carey P.....University Hosp., 111 Maternity Bldg., Ann Arbor
McCormick, Colin C.....13538 Michigan, Dearborn
McCullough, Lester E.....521 David Whitney Bldg., Detroit 26
McDonald, Angus L.....13856 Gratiot Ave., Detroit 5
McDonald, A. W. (L).....15015 Ward, Detroit 27
McDonald, William G.....7301 Schaefer Highway, Dearborn
McDowell, D. B.....Wayne Co. General Hospital, Eloise
McEvitt, Wm. G.....1553 Woodward Ave., Room 412, Detroit 26
McFadyen, H. A.....10 Peterboro, Detroit 1
McGillicuddy, Walter E.....511 Kales Bldg., Detroit 26
McGlaughlin, Nicholas D.....2312 Biddle Avenue, Wyandotte
McGough, Joseph M.....18716 Grand River Ave., Detroit 23
McGuire, John F.....815 Kales Bldg., Detroit 26
McGuire, M. Ruth.....763 Fisher Bldg., Detroit 2
McIntosh, Robert.....13000 Eckles Road, Livonia
McIntyre, W. B.....1233 Audubon, Detroit 30
McKean, G. Thomas.....1515 David Whitney Bldg., Detroit 26
McKean, Richard M.....1515 David Whitney Bldg., Detroit 26
McKeever, George E.....13349 Michigan Avenue, Dearborn
McKenna, Charles J.....14618 E. Seven Mile Rd., Detroit 5
McKinnon, John D.....106 W. Davison, Detroit 3
McKnight, Robert E.....10030 W. McNichols Road, Detroit 21
McLane, Harriet E.....4250 Oregon, Detroit 4
McLean, Brita R.....1365 Cass, Detroit 26
McLean, Don W.....1066 Fisher Bldg., Detroit 2
McLean, Harold G.....10 Peterboro, Detroit 1
McMorrow, Kathryn J.....18278 Biltmore, Detroit 35
McNeill, R. F.....2201 E. Jefferson, Detroit 7
McNichol, L. J.....20032 W. McNichols Road, Detroit 19
McPhee, R. T.....1506 David Broderick Tower, Detroit
McPherson, R. J.....12626 Meyers Road, Detroit 27
McQuiggan, Mark R.....1050 Fisher Bldg., Detroit 2
McQuiggan, Thelma.....Wayne County Gen'l Hosp., Eloise
McRae, Donald H. (L).....275 W. Grand Blvd., Detroit 16
McWhirter, W. W.....Henry Ford Hospital, Detroit 2
Meek, S. F.....13020 Kilbourne, Detroit
Melander, L. W., Jr.....2900 S. Fort St., Detroit 17
Mellen, Hyman S.....622 Maccabees Bldg., Detroit 2
Mellinger, R. C.....Henry Ford Hospital, Detroit 2
Mellins, Harry Z.....Sinai Hospital, Detroit
Melnick, P. J.....VA Center, Los Angeles 25, Calif.
Melnik, Maxim.....1080 Fisher Bldg., Detroit 2
Menagh, Frank R.....Henry Ford Hospital, Detroit 2
Mendelssohn, R. J.....14427 Mack, Detroit 24
Mendoza, Samuel.....4400 Livernois, Detroit 10
Merkel, Charles C.....85 Kercheval, Grosse Pointe 30
Merrill, William O. (L)....958 Fisher Bldg., Detroit 2
Merritt, Earl G.....10 Peterboro, Detroit 1
Mersky, Charlotte I. (A)....32215 Queensboro Avenue, Farmington
Metes, John S.....1261 Fairholme Rd., Grosse Pte. Woods 30
Metzger, Harry C.....25504 Wareham, Huntington Woods
Meyer, Ruben.....18254 Livernois, Detroit 21
Meyers, Marjorie.....5320 John R. Street, Detroit 2
Meyers, Maurice P.....7411 Third Avenue, Detroit 2
Meyers, Sidney S.....19635 Mack Avenue, Detroit
Meyers, S. G.....1320 Maccabees Bldg., Detroit 2
Michael, Michael J.....703 Mutual Bldg., Detroit
Michels, Julius.....9424 Mack Ave., Detroit 14
Mikesell, Wesley B., Jr.....21124 Goddard Rd., Dearborn
Millard, Glenn E.....2900 W. Grand Blvd., Detroit 2
Miller, A. C.....28460 Hollywood, Roseville
Miller, Daniel H.....8011 W. Vernor Highway, Detroit 9
Miller, Elmer B.....10 Peterboro, Detroit 1
Miller, J. Martin.....Henry Ford Hospital, Detroit 2
Miller, Karl L.....1101 David Whitney Bldg., Detroit
Miller, M. H.....27243 Southfield, Lathrup Vill.,
Miller, M. M.....10514 E. Jefferson, Detroit 14 Birmingham
Miller, O. W...Fisher Body Div., GMC—Fleetwood Plant Detroit
Miller, Thomas H.....1305 David Whitney Bldg., Detroit 26
Miller, William Ernest.....10 Peterboro, Detroit 1
Mills, Clinton C.....16190 James Couzens Highway, Detroit 21
Milton, Samuel B.....234 Visger, River Rouge 18
Mintz, Edward I.....7401 Third Avenue, Detroit 2
Mintz, Morris J.....16895 Livernois, Detroit 21
Miral, Solomon P.....4858 E. Davison, Detroit 12
Mishelevich, Sophie.....4651 E. Nine Mile Road, Van Dyke
Miskinis, Martyna.....393 W. Grand Blvd., Detroit
Missavage, Edward, Jr.....Wayne County Gen'l Hosp., Eloise
Mitchell, Augustus W. (M).....314 Visger Road River Rouge
Mitchell, C. Leslie....Henry Ford Hospital, Detroit 2
Mitchell, D. P.....7713 Oakland, Detroit 11
Mitchell, Gertrude F.....355 Lenny Circle, Chapel Hill, No. Carolina
Mitchell, Ralston S.....243 E. Warren, Detroit
Moehlig, Robert C.....964 Fisher Bldg., Detroit 2
Mogill, George.....3150 Second Ave., Detroit 6
Moisides, V. P.....1205 Mutual Bldg., Detroit 26

Moll, Clarence D.....10 Peterboro, Detroit 1
Molnar, S. K.....4525 S. Telegraph, Dearborn
Molner, Joseph G.....334 Bates St., Detroit
Mond, Edward.....1812 David Broderick Tower, Detroit 26
Monson, Robert C.....16404 E. Warren, Detroit 24
Montante, Joseph R.....14447 W. Seven Mile Road Detroit 35
Montgomery, John C.....25622 Coolidge Highway, Huntington Woods
Monto, Raymond W.....Henry Ford Hospital, Detroit 2
Moore, J. W.....8507 W. Eight Mile Road, Detroit 21
Moore, W. R.....541 David Whitney Bldg., Detroit 26
Mopper, Coleman.....14633 E. Seven Mile Road, Detroit 5
Morand, Louis J.....641 David Whitney Bldg., Detroit 26
Morgan, Donald N.....1807 David Whitney Building, Detroit 26
Moriarty, George J.....770 Fisher Bldg., Detroit 2
Morita, Yoshikazu.....1401 Rivard, Detroit 7
Moritz, H. C.....1053 David Whitney Bldg., Detroit 26
Morley, A. R.....1336 Southfield, Lincoln Park
Morley, Harold V.....773 Fisher Building, Detroit 2
Morley, James A.....10520 Plymouth Ave., Detroit 4
Moroun, S. J.....8045 E. Jefferson, Detroit 14
Morris, Harold L.....1069 Fisher Bldg., Detroit 2
Morse, Plinn F. (L).....Harper Hospital, Detroit 1
Morton, David G.....19445 Plymouth Rd., Detroit 28
Morton, John B. (E).....90 E. Warren, Detroit 1
Mosee, W. Jones.....5205 Hastings, Detroit 11
Moseley, F. L.....2561 S. Schaefer, Detroit 17
Mosen, Max M.....8015 Harper, Detroit 13
Moses, J. W.....773 Fisher Bldg., Detroit 2
Moss, Ervin B.....1907 Pingree, Detroit 6
Moss, Nathan H.....2847 Trumbull, Detroit 16
Moss, Selma S.....18254 Livernois, Detroit 21
Mossman, J. D.....1052 Maccabees Building, Detroit 21
Mott, Carlin P.....2395 W. Grand Blvd., Detroit 8
Mullen, J. R.....19003 Ecorse Rd., Allen Park
Munson, Henry T. E.....14344 E. Jefferson, Detroit
Murphy, D. J.....10 Peterboro, Detroit 1
Murphy, E. J.....18500 Joy Road, Detroit 28
Murphy, John M.....17700 Mack Avenue, Grosse Pointe 24
Murphy, Robert T. (M).....113 Martin Place, Detroit 1
Murphy, Scipio G.....603 E. Forest, Detroit 1
Murphy, W. M.....10500 E. Warren, Detroit 14
Murray, G. M.....8045 E. Jefferson, Detroit
Murray, Thomas H.....19345 West McNichols, Detroit 19
Murray, William A.....11841 Ohio Ave., Detroit 4
Muske, Paul H.....5605 Michigan Ave., Detroit 10
Myers, D. W.....224 Professional Building, Detroit 1
Myers, Gordon B.....1401 Rivard St., Detroit

Nagle, John W.....114 Maple, Wyandotte
Nahigian, Russell.....15801 W. McNichols Road, Detroit 35
Nahoum, Antoine.....2201 E. Jefferson, Detroit
Naud, Henry J.....18456 Grand River Ave., Detroit 23
Navori, Cornelius.....2900 S. Fort St., Detroit 17
Nawotka, E. E.....6531 Longacre, Detroit 28
Naylor, A. H.....10033 Tireman, Dearborn
Neeb, Walter G.....16840 E. Warren, Detroit
Nehra, John N.....18514 Mack Avenue, Detroit 36
Neill, Edwin J.....8045 E. Jefferson, Detroit 14
Nelson, Darwin M.....153 W. Grand Blvd., Detroit 16
Nelson, Harry M.....1067 Fisher Bldg., Detroit 2
Nelson, Victor E.....7345 Fenkell, Detroit
Newby, B. G.....2605 W. Grand Blvd., Detroit 8
Newman, Ernest.....17371 Evergreen, Detroit 19
Newman, M. K.....16861 Wyoming Ave., Detroit
Nickel, W. O.....VA Hospital, Dearborn
Nickels, Albert W.....471 Fisher Bldg., Detroit 2
Nielsen, Aage E.....10 Peterboro, Detroit 1
Nielsen, D. R.....13026 Rosemary Ave., Detroit 13
Nigro, Norman D.....10 Peterboro, Detroit 1
Nill, John B.....15001 E. Warren, Detroit 24
Nill, William F.....15001 E. Warren, Detroit 24
Noble, William C.....4045 W. Jefferson, Ecorse 18
Noe, J. T.....20665 W. River Road, Grosse Ile
Nolan, B. E.....1840 Hawthorne, Dearborn
Nolte, E. C.....1716 Bu-Don Court, Columbia, S. C.
Nolting, Wilfred S. H.....15850 E. Warren, Detroit 24
Norconk, A. A.....859 Fisher Bldg., Detroit 2
Norcott, Edith G. S.....16350 Mack Ave., Detroit 24
Northcross, David C.....668 Winder, Detroit 1
Norton, A. B.....1076 Maccabees Bldg., Detroit
Norton, Charles S. (L).....3503 14th Street, Detroit 8
Noshay, William C.....Henry Ford Hospital, Detroit 2
Novack, Richard L.....9928 Farmington Rd., Livonia
Novy, R. L.....858 Fisher Building, Detroit 2
Nunn, James W.....106 W. Davison, Detroit 3
Nyboer, Jan.....Harper Hospital, Detroit 1

O'Brien, E. J.....307 David Whitney Bldg., Detroit 26
O'Brien, G. M.....2501 West Grand Blvd., Detroit 8
Obushkevich, L. S.....10149 Michigan Ave., Dearborn
O'Connor, Katheryn L.....14301 Grand River Ave., Detroit 27
O'Donnell, Charles H.....10 Peterboro, Room 504, Detroit
O'Donnell, David H. (E).....2501 W. Grand Blvd., Detroit
O'Donnell, Dayton H., Jr.....2501 W. Grand Blvd., Detroit
Oetting, E. M.....8045 E. Jefferson, Detroit 14
O'Hare, W. J.....3000 Schaeffer Hwy., Dearborn
Ohmart, Galen B.....8721 E. Jefferson, Detroit 14
Ohrt, Harold F.....285 E. Grand Blvd., Detroit 7
Okun, Milton H.....3261 Sherbourne Road, Detroit 21
Olen, Alex.....13100 Harper, Detroit 13
O'Linn, Francis P.....1055 Fisher Bldg., Detroit 2
Olmsted, George S.....18530 Grand River Ave., Detroit 23
Olson, James A.....28 W. Adams—Suite 911, Detroit 26
Oman, Cyrus F.....12608 Wyoming Ave., Detroit 4
Onoda, B. Y.....6819 Asbury Park, Detroit 28
Oppenheim, J. M.....1050 Fisher Bldg., Detroit 2
Orecklin, Leo.....914 Maccabees Bldg., Detroit 2
Organ, Fred W. (L)..10304 Woodward Ave., Detroit 2
Ormond, R. S.....1951 Monroe, Dearborn
Ornstein, Charles.....19504 Kelly Road, Detroit 24
O'Rourke, Paul V.....307 David Whitney Bldg., Detroit 26
O'Rourke, R. M.....7384 Twelfth St., Detroit 6
Osius, Eugene A...901 David Whitney Bldg., Detroit 26
O'Sullivan, G. S.....14300 W. McNichols, Detroit 35
Otlewski, Eugene A.....853 Fisher Bldg., Detroit 2
Ottaway, John P.....18226 Mack Ave., Grosse Pointe
Owen, Clarence I.....4160 John R., Detroit 1

Palmer, Alice E.....3919 John R., Detroit 1
Palmer, M. R.....7624 Dexter Blvd., Detroit 3
Palmisano, I. J.....25447 Plymouth Road, Detroit 28
Pangburn, L. E.....7 Avalon, Detroit
Panic, Stephen M.....1001 W. Seven Mile Road, Detroit 12
Parcells, F. H.....5224 St. Antoine, Detroit 2
Paris, Delmo A.....Alexander Blain Hospital, Detroit 7
Park, C. W.....8414 Salem Lane, Dearborn
Parker, Benjamin R.....17306 W. 7 Mile Road, Detroit 19
Parnell, John W.....1297 Lochmoor Blvd., Grosse Pointe Woods 30
Parr, Robert W.....8-265 General Motors Bldg., Detroit 2
Parsons, John P.....808 Grand Marais, Grosse Pointe Park 30
Pasternacki, Norbert T.....6203 Chene, Detroit 11
Pastorius, M. K...8830 W. McNichols Road, Detroit 21
Paterson, Walter G. (L).....471 Fisher Bldg., Detroit 3
Pauly, L. R.....4105 Haverhill, Detroit 24
Pawlowski, Jerome I.....2009 East Grand, Detroit
Payne, Eugene H...P.O. Box 118, Roosevelt Park Annex, Detroit 32
Payne, W. A., Jr.....Henry Ford Hospital, Detroit 2

Paysner, Harry A.....13700 Woodward Ave., Detroit 3
Peabody, Charles W.....474 Fisher Bldg., Detroit
Pearce, A. J.....Wayne County Gen'l Hosp., Eloise
Pearlman, Jack.....14146 Bramell, Detroit 23
Pearman, C. L. R.....1509 Kales Bldg., Detroit 26
Pearse, Harry A.....651 Fisher Bldg., Detroit 2
Peat, A. C.....2201 E. Jefferson, Detroit 7
Pedersen, Herbert E.....861 Monroe Blvd., Dearborn
Peggs, George F.....5419 Livernois, Detroit 10
Penberthy, G. C.....1515 David Whitney Bldg., Detroit 26
Pendy, George V.....1808 David Broderick Tower, Detroit
Pendy, John M...1401 David Whitney Bldg., Detroit 26
Pensler, Leslie.....8844 Joy Road, Detroit
Pensler, Meyer M.....8844 Joy Road, Detroit
Pequegnot, Charles F. (L).....6283 W. Outer Drive, Detroit 21
Percy, D. F.....106 W. Davison, Highland Park 3
Perdue, Grace M.....762-63 Fisher Bldg., Detroit 2
Perkin, Frank S.....773 Fisher Bldg., Detroit 2
Perlis, H. L.....1036 Maccabees Bldg., Detroit 2
Perrin, E. V. (A)....4305 Russell Ave., Mt. Rainer, Md.
Perry, E. T.....3027 David Stott Bldg., Detroit 26
Peterman, Earl A.....13700 Woodward, Detroit 3
Peters, Wm. R.....12400 E. Seven Mile Road, Detroit 5
Peterson, R. A.....11445 Harrison, Livonia
Petix, Samuel C.....19207 Schaefer, Detroit 21
Petoskey, Edward A.....6004 West Fort, Detroit 9
Petrick, T. J.....1221 Lincoln Rd., Lincoln Park
Petty, Thomas A.....1204 Yorkshire, Grosse Pointe Park
Peven, Philip S.....18709 Meyers Road, Detroit 21
Pfeiffer, Rudolph L. (L).....469 E. Grand Blvd., Detroit 7
Phillips, B. E.....7600 John R. St., Detroit 2
Plavnick, H. M.....13300 Fenkell, Detroit 27
Picard, J. D.....13349 Michigan Ave., Dearborn
Piccone, Louisa.....10605 W. Warren, East Dearborn
Pichette, J. W.....15146 Michigan Ave., Dearborn
Pickard, Orlando W.....952 Fisher Bldg., Detroit 2
Pierson, M. J.....1030 Maccabees Bldg., Detroit 2
Pietraszewski, A. W.....10338 Jos. Campau, Detroit 12
Pinckard, Karl G.....932 Mason St., Dearborn
Pingel, J. F.....10637 W. Ten Mile Road, Oak Park
Pink, Rose M.....11413 Jos. Campau, Detroit
Pinney, L. J.....28 W. Adams Ave., Detroit
Pino, Ralph H.....208 David Whitney Bldg., Detroit 26
Piper, Ralph R.....1530 McKinstry Ave., Detroit 9
Pittman, J. E.....1613 David Whitney Bldg., Detroit 26
Platz, Carol K.....11368 Kelly Road, Detroit
Pliskow, Harold.....10730 W. Seven Mile Road, Detroit 21
Podolsky, Harold M.....2785 S. Fort, Detroit 25
Poirier, Ralph A.....1405 Mutual Bldg., Detroit 26
Polentz, Charles P.....10 Peterboro, Detroit 1
Polk, John E. (M).....8742 Twelfth St., Detroit 6
Pollack, John J.....18200 Wyoming Ave., Detroit 21
Ponka, Joseph L.....Henry Ford Hospital, Detroit 2
Pool, Walter D.....20901 Moross Road, Detroit
Poos, Edgar E.....554 Fisher Bldg., Detroit 2
Porretta, Anthony C.....11146 Gratiot, Detroit 5
Porretta, F. S.....1076 Maccabees Bldg., Detroit 2
Porter, F. G.....14001 Greenfield, Detroit 27
Porter, Howard J. (R).....36911 Goddard Road, Romulus
Portnoy, Harry.....4253 Leslie, Detroit
Posch, J. L.....1410 Kales Bldg., Detroit
Posner, Irving.....20211 Greenfield Rd., Detroit 35
Potts, E. B.....8943 12th St., Detroit 6
Pratt, Jean P. (L).....18910 Fairway Drive, Detroit 21
Pratt, Lawrence A.....3919 John R., Detroit
Prendergast, J. J.....Box 756 W. Sarasota, Fla.
Prescod, H. J.....8943 12th St., Detroit
Preston, Ruth E.....566 Fisher Bldg., Detroit 2
Price, Alvin Edwin....313 David Whitney Bldg., Detroit
Price, A. Hazen.....62 W. Kirby, Detroit 2
Priest, E. M.....Henry Ford Hospital, Detroit 2
Priest, R. J.....Henry Ford Hospital, Detroit
Prince, A. E.....18060 Conant, Detroit 34
Prisbe, Edward J.....16603 Plymouth Road, Detroit 27
Priver, Julien.....6741 W. Outer Drive, Detroit 35
Procailo, A. B.....29627 Ford Road, Garden City
Proctor, Bruce....1419 David Whitney Bldg., Detroit 26
Proud, Robert H.....26151 Huron River Drive, Flat Rock
Proud, R. F.....26151 Huron River Drive, Flat Rock
Prust, F. W. (M).....Harper Hospital, Detroit
Pugh, Howard C.....1729 David Whitney Bldg., Detroit 26
Pugliesi, Benedetto.....9489 E. Outer Drive, Detroit 5
Purcell, Frank H.....1808 David Broderick Tower, Detroit 26
Purves, William H. L.....1767 Guardian Bldg., Detroit 26

Quigley, E. H.....2051 Monroe, Dearborn
Quigley, William.....742 Maccabees Bldg., Detroit
Quinn, Edward L.....Henry Ford Hospital, Detroit 2

Rabinovitch, Bella.....4063 Waverly, Apt. 106, Detroit
Rahm, Lambert P.....14411 E. Jefferson, Detroit 19
Raiford, F. P.....681 E. Vernor Hwy., Detroit 1
Raiford, Frank P., Jr.....681 E. Vernor Hwy., Detroit 1
Ralyea, John.....Highland Park Gen'l Hosp., Highland Park
Ramsey, R. H.....861 Monroe, Dearborn 8
Randall, David S.....1765 W. Fort St., Lincoln Park
Raskin, Herbert A.....611 Kales Bldg., Detroit 26
Raskin, Morris.....987 E. Jefferson, Detroit
Rastello, Peter B.....6307 W. Fort St., Detroit 9
Ratigan, C. S.....22276 Garrison, Dearborn
Rau, Frederick W.....113 Martin Place, Detroit
Ravitz, L. A.....987 E. Jefferson, Detroit 7
Ray, K. J.....2254 22nd St., Wyandotte
Raynor, Harold F.....Room 700, 13700 Woodward Ave., Detroit 3
Rebuck, John W.....Henry Ford Hospital, Detroit
Redding, Lowell G.....1336 Southfield, Lincoln Park 25
Reder, Ben.....20731 Evergreen, Detroit 19
Redfern, William E.....Henry Ford Hospital, Detroit 2
Reed, Everett Hobart (A).....4034 Webb, Detroit
Reed, H. Walter.....8150 Grand River Ave., Detroit 4
Reed, Ivor E.....305 David Whitney Bldg., Detroit 26
Reed, Joseph O., Jr.....448 Lincoln, Grosse Pointe 30
Rees, Howard C.....15700 Mack Ave., Detroit 24
Reichling, R. J., Jr. (A).....18514 Mack, Grosse Pointe Farms 30
Reid, John Gilbert.....1337 David Whitney Bldg., Detroit 26
Reid, Wesley G.....974 Fisher Bldg., Detroit 2
Reiff, Morris V.....10241 Joy Road, Detroit
Reinbolt, Charles A. (L)....33570 Quaker Valley Road, Farmington
Reiners, C. R.....24250 Kipling, Oak Park
Reinsh, Ernest R.....18674 Muirland Ave., Detroit
Reisman, N. J.....15344 W. McNichols, Detroit 35
Reisman, S. G.....1078 Maccabees Bldg., Detroit
Reive, David L.....24401 Plymouth, Detroit 28
Rennell, Leo P.....2567 West Grand Blvd., Detroit 8
Rentenbach, R. F...314 David Whitney Bldg., Detroit 26
Reveno, William S.....958 Fisher Bldg., Detroit 2
Reyner, C. E.....515 Professional Bldg., Detroit 1
Reynolds, Lawrence.....10 Peterboro, Detroit 1
Reynolds, R. P.....858 Fisher Bldg., Detroit 2
Rezanka, H. J.....952 Westchester Road, Grosse Pointe 30
Rhoades, Francis P.....970 Maccabees Bldg., Detroit 2
Rice, Harold B.....10 Peterboro, Detroit 1
Richardson, Allan L. (R).....Naubinway
Richardson, Robert P.....3714 Monroe, Wayne
Richardson, Robert P.....25622 Coolidge Highway, Huntington Woods
Rick, Paul J.....4227 Mt. Elliott, Detroit 7
Ridge, Ralph W.....100 Oak St., Wyandotte

Rieckhoff, George G.....14905 E. Jefferson Ave., Detroit 15
Rieden, J. A.....18053 Muirland, Detroit 21
Rieger, John B. (L).....1265 David Whitney Bldg., Detroit 26
Rieger, Mary H.....746 Pallister, Detroit
Riethmiller, Robert F.....623 Pemberton Road, Detroit 30
Rinkel, Robert W.....6586 Allen Road, Allen Park
Riseborough, E. C.....90 E. Warren, Detroit 1
Ritter, George.....15801 W. McNichols, Detroit 35
Rizzo, Paul.....14874 Seymour, Detroit 5
Robb, Edward L.....17380 Livernois, Detroit
Robb, Herbert F.....381 S. Main St., Belleville
Robb, J. Milton (L).....633 David Whitney Bldg., Detroit 26
Roberts, Arthur J.....1310 Warwick, Lincoln Park
Robins, Samuel C.....18963 Jas. Couzens Highway, Detroit 21
Robinson, George W. (L).....1701 E. Grand Blvd., Detroit 11
Robinson, Howard.....953 Fisher Bldg., Detroit
Robinson, H. A.....10040 Yellowstone Ave., Detroit 4
Robinson, J. H., Jr.....1553 W. Grand Blvd., Detroit 8
Robinson, R. G.....3751 31st St., Detroit 10
Roeglin, O. F.....18412 Mack Ave., Grosse Pointe Farms 30
Rogers, Aaron Z.....20451 Mack Ave., Grosse Pointe Woods
Rogers, C. S.....Henry Ford Hospital, Detroit 2
Rogers, George E. B.....2108 David Broderick Tower, Detroit 26
Rogers, James D.....2966 Biddle Ave., Wyandotte
Rogers, J. T.....16921 James Couzens Hwy., Detroit 19
Rogin, James R.....3027 David Stott Bldg., Detroit 26
Rogoff, Abraham S.....676 Maccabees Bldg., Detroit 2
Rohde, Paul C.....12282 E. Outer Drive, Detroit 24
Rom, Jack.....8600 W. McNichols Road, Detroit 35
Roman, Stanley J.....15020 Michigan Ave., Dearborn
Ronayne, J. J.....16116 W. McNichols Road, Detroit
Roney, Eugene H.....17187 Schaefer Highway, Detroit
Rosbolt, Oscar P.....8505 Plymouth Road, Detroit 4
Rosefield, John L.....65 W. Hancock, Detroit 1
Rosen, Harold M.....8620 W. McNichols, Detroit 21
Rosen, T. S.....19340 Monte Vista, Detroit 21
Rosenbaum, Herbert....19776 Snowden Ave., Detroit 35
Rosenbloom, A. B.....310 E. Jefferson, Detroit 31
Rosenthal, Louis H...15401 W. McNichols Rd., Detroit
Rosenthal, Samuel A.....16350 Hamilton, Detroit 3
Rosenwach, F. F.....19149 W. 7 Mile Road, Detroit 19
Rosenzweig, Saul R.....2114 David Broderick Tower, Detroit 26
Ross, Donald G.....722 Notre Dame Ave., Grosse Pointe
Ross, Hyman D.....19149 Joy Road, Detroit 28
Roth, Edward T.....640 E. Grand Blvd., Detroit 7
Roth, Theodore I.....60 W. Hancock, Detroit
Rothbart, Harold B.....25622 Coolidge Highway, Huntington Woods
Rothman, Emil D.....19467 Livernois, Detroit 21
Rottenberg, C. M. J.....13419 Fenkell, Detroit 27
Rottenberg, Leon.....13419 Fenkell, Detroit 27
Rourke, R. F.....4350 Haverhill, Detroit 24
Rowda, Michael S.....2001 E. Grand Blvd., Detroit 11
Rowe, J. J., Jr.....401 N. Brady, Dearborn
Royer, R. R.....16840 E. Warren Ave., Detroit 24
Rucker, Julian J.....668 Farnsworth Ave., Detroit 2
Ruedemann, A. D.....1018 Three Mile Drive, Detroit 30
Ruedemann, A. D., Jr.....242 Lewiston Rd., Detroit 36
Rueger, Milton J.....708 Kales Bldg., Detroit 26
Rueger, Ralph C.....9149 E. Jefferson, Detroit 14
Runge, Edward F.....25449 Rouge River Dr., Dearborn
Rupe, C. E.....Henry Ford Hospital, Detroit 2
Rupp, Jacob R.....7056 W. Fort St., Detroit 26
Rupprecht, Emil F.....5525 W. Chicago Blvd., Detroit
Ruskin, Samuel H.....1306 David Broderick Tower, Detroit 26
Russell, J. C. (L).....2934 Davison St., Detroit 12
Rutzen, Arthur C.....771 Fisher Bldg., Detroit 2
Ryan, James M.....19207 Schaefer Road, Detroit 35
Rydzewski, Jos. B.....12170 Jos. Campau, Detroit 12

Sack, Anthony G.....2567 W. Grand Blvd., Detroit 8
Sa'di, Lutfi M.....525 Professional Bldg., Detroit 1
Sadler, Henry H., Jr.....15 Kercheval, Detroit
Sadzikowski, Joseph T.....29901 Ford Rd., Garden City
Sage, Bernard A.....1013 Haigh, Dearborn
Sage, Edward O. (E).....415 Burns Drive, Detroit
Sage, Thomas.....7815 E. Jefferson, Detroit 14
Sager, Edward L.....13902 Gratiot Ave., Detroit 5
St. Amour, Hector J.....20120 Renfrew, Detroit 21
St. Louis, R. J.....10909 W. Jefferson, River Rouge 18
Sakorraphos, Stelios N.....1346 Broadway, Detroit 26
Salan, L. J.....995 S. Main St., Plymouth
Salchow, Paul T.....Herman Kiefer Hospital, Detroit
Salisbury, Carolyn S.....527 Professional Bldg., Detroit
Salowich, John N.....15235 Harrison, Allen Park
Saltzstein, Harry C.....966 Fisher Bldg., Detroit 2
Sand, Harry H.....24110 Oxford, Dearborn
Sander, F. V., Jr.....344 Glendale, Highland Park
Sander, Irvin W.....5050 Cass Ave., Detroit 2
Sanders, Alex W.....920 Maccabees Bldg., Detroit 2
Sanderson, Alvord R.....978 Pemberton Road, Grosse Pointe Park
Sanderson, Susanne M. (L).....The Shelton Hotel, 15 E. Kirby, Detroit
Sandler, Nathaniel.....1004 Kales Bldg., Detroit 26
Sandweiss, D. J.....9739 Dexter Blvd., Detroit 6
Sapala, M. Andrew.....460 Fisher Bldg., Detroit
Saraf, L. B.....14540 E. Warren, Detroit
Sargent, Richard C.....17357 Fenkell Ave., Detroit 27
Sargent, William R.....17357 Fenkell Ave., Detroit 27
Sauber, B. J.....14500 Rutland, Detroit 27
Sauk, J. J.....302 W. McNichols Road, Detroit 3
Sauter, Simon H.....1082 E. Grand Blvd., Detroit 7
Savignac, Eugene M.....4777 E. Outer Drive, Detroit 12
Scarney, Herman D.....573 Fisher Bldg., Detroit 2
Schaefer, R. L.....1206 Kales Bldg., Detroit 26
Schaefer, R. L., Jr.....1204 Kales Bldg., Detroit 26
Schaeffer, Martin.....10720 W. Seven Mile Rd., Detroit 21
Schane, David A.....17157 Mendota, Detroit 21
Scheinberg, Schayel.....966 Fisher Bldg., Detroit
Schembeck, I. S.....1655 David Whitney Bldg., Detroit 26
Schiller, A. E.....1737 David Whitney Bldg., Detroit
Schillinger, Harold K.....4838 Neckel, Dearborn
Schimek, R. A.....Henry Ford Hospital, Detroit 2
Schirack, R. D. (A).....Luzerne
Schkloven, Norman.....20051 Warrington, Detroit 21
Schlafer, Nathan H.....1806 David Broderick Tower, Detroit 26
Schlesinger, Henry.....13534 Woodward, Detroit 3
Schmaltz, J. D.....1701 David Broderick Tower, Detroit 26
Schmidt, G. F.....1074 Vernier Road, Grosse Pointe Woods 36
Schmidt, Harry E.....667 Fisher Bldg., Detroit 2
Schmidt, Milton R.....2615 W. Jefferson, Trenton
Schmidt, Werner F.....1807 Mutual Bldg., Detroit
Schmier, Burton L.....5440 Cass, Detroit 2
Schmitt, Norman L.....10127 W. McNichols, Detroit 21
Schneck, R. J.....641 David Whitney Bldg., Detroit 26
Schneider, Charles L.....22148 Michigan Ave., Dearborn
Schneider, Curt P.....655 Fisher Bldg., Detroit 2
Schoenfield, G. D...8830 W. McNichols Rd., Detroit 21
Schooten, Sarah S.....13700 Woodward Ave., Highland Park 3
Schorr, Robert L. (E).....1325 E. Jefferson, Detroit 7
Schreiber, Frederic.....10 Peterboro, Detroit 1
Schroeder, Carlisle F.....7815 E. Jefferson, Detroit
Schuknecht, Harold F.....Henry Ford Hospital, Detroit 2
Schulte, Carl H.....808 Mutual Bldg., Detroit 26
Schultz, C. H.....19353 Carlyle, Dearborn
Schultz, Ernest C.....840 David Whitney Bldg., Detroit 26

Schwartz, Ben.....275 W. Grand Blvd., Detroit 16
Schwartz, H. A.....7605 Puritan, Detroit 21
Schwartz, Louis A.....861 Fisher Bldg., Detroit 2
Schwartz, Oscar D.....7441 West Seven Mile Road, Detroit
Schwartzberg, Jos. A.....19445 Plymouth, Detroit
Schweigert, C. F.....10627 Cadieux, Detroit 24
Schwocho, N. H.....6525 Park, Allen Park
Sciarrino, Stanley V.....15388 Livernois, Detroit 21
Scott, Marrion U.....79 Kercheval, Grosse Pointe 36
Scott, R. J.....7333 W. 7 Mile Road, Detroit 21
Scott, William J.....79 Kercheval, Grosse Pointe 36
Seabrooks, B. F., Jr.....9136 Oakland Ave., Detroit
Secord, Eugene W.....18980 Wyoming, Detroit 21
Seeley, James B.....5460 Shaefer Rd., Dearborn 2
Seeley, Ward F...1807 David Whitney Bldg., Detroit 26
Segar, Laurence F.....1410 David Broderick Tower, Detroit 26
Segel, N. P.....2116 David Stott Bldg., Detroit 26
Seibert, Alvin H. (L).....1180 Bedford Road, Grosse Pointe Park 30
Seiferlein, A. L.....508 David Whitney Bldg., Detroit 26
Self, William G.....19365 Mack Ave., Detroit
Seligson, Alvin (M)..1505 Morris Ave., Bronx 57, N. Y.
Sellers, Charles W.....2314 W. Grand Blvd., Detroit 8
Sellers, Graham A...2405 W. McNichols Rd., Detroit 21
Serrester, Bernard F.....18650 W. Warren, Detroit 10
Seski, Arthur G.....863 Fisher Bldg., Detroit 2
Sewell, George....1116 David Whitney Bldg., Detroit 26
Sewell, Guy W.....16321 Mack Ave., Detroit 24
Shada, J. C.....17830 East Warren, Detroit 24
Shafarman, Eugene M.....5320 John R., Detroit 2
Shaffer, Jos. H.....2401 Rodner Drive, Birmingham
Shaffer, Loren W.....325 Kercheval, Grosse Pointe Farms 36
Shafter, Royce R.....655 Fisher Bldg., Detroit 2
Shanoski, Stanley J.....728 Maccabees Bldg., Detroit 2
Shapiro, I. Allen.....4400 Livernois, Detroit 21
Shapiro, Jacob.....15085 E. Seven Mile Rd., Detroit
Shapiro, Reuben I.....636 Maccabees Bldg., Detroit
Shargel, G. M. J.....1800 Tuxedo, Detroit 6
Sharp, Elwood.....633 Neff Rd., Grosse Pointe 30
Sharpe, W. D.....13503 Northlawn, Detroit 38
Sharrer, Charles H.....16840 E. Warren, Detroit 24
Sheahan, R. C.....Henry Ford Hospital, Detroit 2
Shekerjian, Armen (M).....1500 Kings Road, Leesville, La.
Shelden, Warren E.....14215 W. McNichols Road, Detroit
Sheldon, J. A. (L).....1435 Three Mile Drive, Grosse Pointe Park 30
Shellhamer, C. S.....438 Maccabees Bldg., Detroit
Shelton, C. F.....910 David Broderick Tower, Detroit 26
Sheppard, Emma L. W. (R).....7245 Engleman Ave., Centerline
Sherman, Marvin.....1800 Tuxedo, Detroit 6
Sherman, William LaRue.....10 Peterboro, Detroit 1
Sherman, Wm. L., Jr. (M).....201 E. Kirby, Detroit 2
Sherrin, E. R.....17555 James Couzens Highway, Detroit 35
Shewchuk, Alexander P.....7300 Allen Road, Allen Park
Shields, William L.....18600 Woodward, Detroit 3
Shifrin, Peter G.....20211 Greenfield, Detroit 35
Shiovitz, Louis.....5419 Michigan Ave., Detroit 10
Shipley, R. E.....San Francisco Naval Shipyard, San Francisco 24, Calif.
Shipton, W. H. (A)....19226 Rockcastle, Harper Woods
Shlain, Benjamin.....10244 W. 7 Mile Road, Detroit
Shortz, Gerald.....1994 Vernier, Grosse Pointe Woods
Shotwell, Carlos W. (L)..1411 Atkinson Ave., Detroit 6
Shreve, Alfred J.....10149 Michigan, Dearborn
Shulak, Irving B.....1714 David Broderick Tower, Detroit 26
Shulman, Herschel A.....1120 Maccabees Bldg., Detroit 2
Shumaker, E. J.....970 Fisher Bldg., Detroit
Siddall, Roger S.....955 Fisher Bldg., Detroit 2
Sieber, Edward H.....15146 Michigan Ave., Dearborn
Siefert, John L.....12645 Gratiot, Detroit 5
Siefert, William A.....17400 Grand River Ave., Detroit 27
Siegel, Henry.....10440 W. 7 Mile Road, Detroit 21
Siero, J. M. (M).....9105 Van Dyke, Detroit 13
Sievers, Lorraine A.....Harper Hospital, Detroit
Sigler, J. W.....Henry Ford Hospital, Detroit 2
Sill, Jack A.....19635 Mack Ave., Detroit 30
Sillery, R. J.....16927 St. Paul, Grosse Pointe 30
Silvarman, I. Z.....9103 Van Dyke, Detroit 13
Silver, I. W.....20000 W. Chicago, Detroit 28
Silverman, Maurice M.....3925 Joy Road, Detroit 6
Silverman, Max.....2240 W. Grand Blvd., Detroit 8
Simmons, Donald R.....815 Kales Bldg., Detroit
Simon, H. G. (M).....5097 Bal-For Rd., Detroit 24
Simpson, G. E.....18101 Warren Ave., Detroit
Sinclair, James W.....16404 E. Warren, Detroit 24
Singer, Floyd W.....24441 Emerson, Dearborn
Sippola, George W.....13603 LaSalle, Detroit 6
Sisson, John M.....17320 W. McNichols, Detroit 35
Sklover, J. I.....1326 E. 7 Mile Road, Detroit 3
Skully, Edward J.....13535 Woodward Ave., Detroit 3
Sladen, F. J. (L).....Henry Ford Hospital, Detroit
Slahetka, Vincent E.....7435 Michigan, Detroit 10
Slaugenhaupt, J. G.....600 Griswold, Suite 602, Detroit 26
Slaughter, F. M.....455 E. Adams, Detroit 26
Slazinski, Leo W.....7618 Michigan, Detroit 10
Slevin, John G.....1304 David Broderick Tower, Detroit 26
Sliwin, E. P.....4917 Schaefer, Dearborn
Slusky, Joseph.....1527 David Stott Bldg., Detroit
Slutzky, Gilbert....10720 W. Seven Mile Rd., Detroit 21
Sly, R. F.....22213 Tenny, Dearborn
Small, Henry.....11507 Hamilton, Detroit 3
Small, John.....912 Maccabees Bldg., Detroit 2
Smathers, H. M.....14219 W. McNichols, Detroit 35
Smathers, W. M.....14219 W. McNichols Road, Detroit 35
Smeck, Arthur R. (L).....1036 Waterman, Detroit 9
Smith, Clarence V.....1716 E. Grand Blvd., Detroit 11
Smith, Claude A. (L).....7 Adams Lane, Dearborn 2
Smith, C. M.....2715 S. Schaefer Hwy., Detroit 17
Smith, D. H.....1800 Tuxedo, Detroit 6
Smith, F. J.....369 Wimbleton Dr., Birmingham
Smith, Henry L.....16401 Grand River Ave., Detroit 27
Smith, J. Allen.....14140 Puritan, Detroit 27
Smith, J. C. (A).....(No Address)
Smith, R. F.....Henry Ford Hospital, Detroit 2
Smith, Richmond W., Jr.....Henry Ford Hospital, Detroit 2
Smolenski, J. J.....13815 Puritan, Detroit 27
Smyka, E. J.....6111 Charles, Detroit 12
Smyka, Stanley M.....716 Kales Bldg., Detroit 26
Snedeker, Bernard C.....18800 Woodward Ave., Detroit 3
Snider, J. J. (M).....22699 Van Dyke, Van Dyke
Snow, L. W.....508 W. Main St., Northville
Snyder, Arthur M.....13700 Woodward Ave., Suite 503, Detroit 3
Sobel, Robert A.....18980 Wyoming, Detroit 21
Socall, Charles J.....8500 Mt. Elliott, Detroit 11
Sokol, William M.....10 Peterboro, Detroit 1
Sokolov, Raymond A.....755 Fisher Bldg., Detroit 2
Soller, A. S.....7310 Grand River, Detroit 4
Solomon, A. B.....16636 W Chicago, Detroit 28
Sonda, Lewis P.....544 David Whitney Bldg., Detroit 26
Sorock, Milton L.....19467 Livernois, Detroit 21
Spademan, Loren C.....1013 David Whitney Bldg., Detroit 26
Speck, Carlos C.....6525 Park Ave., Allen Park
Spector, Maurice J.....12504 E. Jefferson, Detroit 14
Spero, Gerald D.....7330 W. Seven Mile Road, Detroit 21
Sphire, R. D.....4160 John R. St., Detroit 1
Spiro, Adolph S.....11255 Mack Ave., Detroit 15
Springborn, B. R.....15818 E. Warren, Detroit 24

Sprunk, Carl J.....2900 Oakland Blvd., Melvindale
Squires, W. H.....Wayne County General Hospital, Eloise
Stafford, Frank W. J.....1111 Griswold, Detroit
Stalker, Hugh.....25 Radner Circle, Grosse Pointe Farms 36
Stamell, B. B.....658 Maccabees Bldg., Detroit
Stamell, Meyer.....14634 Greenfield, Detroit
Staniszewski, Casimir.....1301 W. Grand Blvd., Detroit
Stanton, James M.....1001 Mutual Bldg., Detroit
Stanton, M. R.....3400 W. Warren, Detroit 8
Stapleton, William J., Jr. (E).....641 David Whitney Bldg., Detroit 26
Starkman, Morris....14624 E. Seven Mile Rd., Detroit 5
Starrs, Thomas C. (L).....509 Fox Theater Bldg., Detroit 1
Staryk, Steven E.....1010 N. Oxford, Grosse Pointe Woods 36
Staub, Howard P.....9210 Jerome, Detroit 39
Staudt, L. W.....Chrysler Corporation, Highland Park 3
Stearns, A. B.....504 Doctors Bldg., Detroit 1
Stebbins, Charles E.....856 Fisher Bldg., Detroit
Steele, C. H.....1144 David Whitney Bldg., Detroit 26
Stefani, E. L.....18455 James Couzens Hwy., Detroit 35
Stefani, Raymond T.....13516 Stoepel, Detroit 4
Steffensen, Ellis H.....Henry Ford Hospital, Detroit
Stein, Albert H.....19334 San Juan Drive, Detroit 21
Stein, Emory.....13115 Woodward Ave., Detroit 3
Stein, James R.....125 W. 9 Mile Road, Ferndale
Stein, Saul C.....23105 Van Dyke, Van Dyke
Steinbach, Albert L. (M)....2217 Beecher Circle, S.W., Atlanta 11, Georgia
Steinbach, Henry B.....411 Lakeland, Grosse Pointe
Steinberger, Eugene J.....6402 W. Fort St., Detroit 9
Steiner, Frederick B.....29627 Ford Road, Garden City
Steiner, Gabriel.....10 Peterboro, Detroit 1
Steiner, L. J.....12636 Chelsea Ave., Detroit 13
Steiner, Max.....6-246 General Motors Bldg., Detroit 2
Steinhardt, Milton J.....10720 W. Seven Mile Road, Detroit
Stellhorn, Chester E.....12900 W. 7 Mile Road, Detroit 21
Stellhorn, Mary Christine.....16616 Mack Ave., Detroit
Stempel, E. M.....18324 Fairfield, Detroit 21
Sterba, Richard F.....1130 Parker, Detroit 14
Sterling, Robert R.....1541 David Whitney Bldg., Detroit 26
Stern, E. A.....12710 Dexter, Detroit 6
Stern, H. L.....14137 Warwick, Detroit 23
Stern, Julian.....1314 David Whitney Bldg., Detroit 26
Stern, L. H.....1630 Wellesley, Highland Park 3
Stern, Louis D.....1049 David Whitney Bldg., Detroit
Stevens, C. H.....10 Peterboro, Detroit 1
Stevenson, Charles S.....1405 Kales Bldg., Detroit
Stewart, Lula Belle.....8635 Dexter Blvd., Detroit 6
Stewart, M. N., Jr.....411 Professional Bldg., Detroit
Stewart, Marjorie R...25750 Outer Drive, Lincoln Park
Stewart, Thomas O.....17187 Schaefer Hwy., Detroit 35
Stiefel, Daniel M.....1563 David Whitney Bldg., Detroit 26
Stillwater, Karl.....18311 Appoline, Detroit 35
Stirling, A. M.....10 Peterboro, Detroit 1
Stith, Dwight E.....505 Owen, Detroit 2
Stobbe, Godfrey D.....Grace Hospital, Detroit
Stocker, Lawrence L.....7330 W. Seven Mile Road, Detroit 21
Stocker, Marvin L.....116 North Adams St., Ypsilanti
Stockwell, B. W.....703 Doctors Bldg., 3919 John R, Detroit
Stokfisz, Thaddeus.....7012 Michigan Ave., Detroit 10
Stone, Julius.....14633 E. Seven Mile, Detroit 5
Stone, S. L.....7411 Third Ave., Detroit 2
Straith, Claire L.....2605 West Grand Boulevard, Detroit 8
Straith, R. E.....2605 W. Grand Blvd., Detroit 8
Strand, Martin E.....22400 Cherry Hill, West Dearborn
Stratton, Donald P.....118 W. Grand Ave., Detroit 3
Stricker, Henry D.....5624 W. Fort St., Detroit 9
Strickroot, Fred L.....707 Kales Bldg., Detroit
Strohschein, D. F.....1063 Fisher Bldg., Detroit 2
Strutz, Wm. C.....1553 Woodward Ave., Detroit
Stryker, Joan C.....2853 Biddle St., Wyandotte
Stryker, Walter A.....Wyandotte General Hospital, Wyandotte
Stubbs, C. T.....13930 Woodward, Detroit 3
Stubbs, Harold W.....13930 Woodward, Detroit 3
Stump, George D.....1314 David Whitney Bldg., Detroit 26
Sugar, David I.....13120 Broadstreet, Detroit
Sugar, H. Saul.....311 Kales Bldg., Detroit
Sugarman, Marcus H.....9739 Dexter, Detroit 6
Sullivan, Hugh A.....1053 David Whitney Bldg., Detroit 26
Sultzman, L. C.....474 Fisher Bldg., Detroit 2
Summers, William A.....1613 David Whitney Bldg., Detroit 26
Summers, W. S. (L).....402 N. Palmway, Lake Worth, Fla.
Surbis, John P.....22277 Long Blvd., Dearborn
Sutherland, Jacob M.....662 Fisher Bldg., Detroit 2
Suwinski, R. H.....9243 Joseph Campau, Detroit 12
Swan, L. F.....3400 McDougall, Detroit 7
Swanson, Carl W.....936 Alter Road, Detroit 15
Swanson, Cleary N.....16921 James Couzens Highway, Detroit 27
Swanson, Robert G.....936 Alter Road, Detroit
Swartz, F. G., Jr.....1229 David Whitney Bldg., Detroit 26
Sweeny, Donald N., Jr.....8445 E. Jefferson, Detroit 14
Swihart, J. J.....912 Kales Bldg., Detroit 26
Switzer, Bertrand C. (R).....12246 Ilene, Detroit 4
Syphax, Charles S., Jr.....1819 E. Davison, Detroit
Szabunia, S. C.....19600 Van Dyke, Detroit 34
Szilagyi, D. Emerick.....14638 Stahelin, Detroit 23
Szladek, F. J.....4045 W. Jefferson, Ecorse
Szmigiel, A. J.....7527 E. 7 Mile Road, Detroit 34

Talbot, Frank G.....1365 Cass, Room 1429, Detroit 26
Tallant, Edward J.....14001 Greenfield, Detroit
Talmers, Frederick.....Receiving Hospital, Detroit 26
Tamblyn, E. J.....15315 E. Jefferson, Detroit 30
Tandatnick, Joseph.....Sinai Hospital, Detroit 35
Tanner, Natalia M.....8033 Twelfth St., Detroit 6
Tapert, Julius C.....888 Chalmers, Detroit 15
Tasker, Helen E.....76 W. Adams, Detroit
Tassie, Ralph N.....14060 Saratoga, Detroit
Tatelis, Gabriel A.....1011 E. Grand Blvd., Detroit
Tatelman, Maurice.....410 Kales Bldg., Detroit 26
Taurence, William H.....1860 Ford, Wyandotte
Taylor, Aaron.....Veterans Hospital, Dearborn
Taylor, Ivan B.....3919 John R., Detroit
Taylor, J. L.....1566 W. Grand Blvd., Detroit
Taylor, Nelson M.....722 Notre Dame Ave., Grosse Pointe 30
Taylor, W. V.....14727 E. Jefferson, Detroit 15
Tazzioli, Henry A.....21970 Moross Road, Detroit 36
Tear, Malcolm J. J.....5008 Trumbull Ave., Detroit 8
Teitelbaum, Myer.....405 Kales Bldg., Detroit 26
Tenaglia, Thomas A.....9 Salliotte, Ecorse 18
Tenerowicz, Rudolph G.....2925 Lehman, Detroit 12
Texter, Elmer C.....7457 Gratiot Ave., Detroit 13
Thomas, D. F.....17410 Santa Barbara, Detroit 21
Thompson, H. O.....6014 W. Fort, Detroit 9
Thompson, Arthur Lee.....6125 Scotten, Detroit 10
Thompson, W. A.....6125 Scotten, Detroit 10
Thomson, Daniel C.....18459 Parke Lane, Grosse Ile
Thornell, H. E.....7407 12th St., Detroit 6
Thornton, J. A.....525 Visger, Ecorse
Thosteson, George C.....1139 David Whitney Bldg., Detroit 26
Thumann, R. C., Jr.....1757 David Whitney Bldg., Detroit
Thumin, Sadie.....15306 Joy Road, Detroit
Ting, Yoeh M.....3515 West Point, Dearborn
Tkaczuk, Dmytro.....10345 Joseph Campau, Detroit 12

Toaz, Robert B.....13700 Woodward, Detroit 3
Tobin, J. S.....2860 Clark St., Detroit
Todoroff, Theodore.....904 S. Military, Dearborn
Tolbert, Vassal G.....3705 Hastings, Detroit 1
Tomsu, Charles L.....6170 Michigan Ave., Detroit 10
Torres, Estelle.....3985 Caniff, Detroit
Torres, Raul M., Jr.....3985 Caniff, Detroit 12
Tourkow, L. P.....4741 Fullerton, Detroit 38
Townsend, Frank M., Jr.....1551 Trumbull, Detroit 16
Trader, Kenneth N.....951 Fisher Bldg., Detroit 2
Tregenza, W. K.....18530 Grand River, Detroit
Tremain, Harold L.....106 W. Davison, Detroit
Trinkaus, W. F.....20601 Harper, Detroit 36
Trisler, J. J.....651 Fisher Bldg., Detroit 2
Troester, George A.....1140 Maccabees Bldg., Detroit
Trombino, James F. V.....2567 W. Grand Blvd., Detroit 8
Trombley, Joseph J.....18595 Grand River Ave., Detroit 23
Truba, P. K.....1409 Kales Bldg., Detroit 26
Trudeau, J. M.....14807 W. McNichols Rd., Detroit 35
Trudgen, P. E.....3605 Parker, Dearborn
Truszkowski, E. G.....3411 Evaline, Detroit 12
Trythall, S. W.....13300 Livernois, Detroit 4
Tulloch, John.....923 David Whitney Bldg., Detroit
Tupper, Roy D.....15101 W. 7 Mile Road, Detroit 19
Turbett, Claude W. (L)....4230 Commonwealth Ave., Detroit 8
Turcotte, V. J. (A).....545 Lakeland, Detroit 30
Turkel, Henry.....1302 Industrial Bank Bldg., Detroit 26
Turnbull, Jack V.....22340 Michigan, Dearborn
Turner, John J.....25447 Plymouth Road, Detroit
Tuttle, W. M.....307 David Whitney Bldg., Detroit 26
Tuynman, Peter E.....20032 W. McNichols Rd., Detroit 19

Ujda, Chester J.....3106 Washington, Wayne
Ulbrich, Henry L. (L).....1540 Torrey Road, Grosse Pointe Woods 36
Ulmer, A. A.....1989 Broadstone Ave., Grosse Pointe 36
Ulrich, Willis H.....22365 Grand River, Detroit
Umphrey, Clarence E.....15300 W. McNichols Rd., Detroit 35
Unkefer, W. T.....1063 Fisher Bldg., Detroit 2
Usher, William Kay.....15605 Kercheval, Detroit 30
Usndek, Harold E.....14632 E. Seven Mile Rd., Detroit
Vale, C. Fremont (R).....2615 Via Tuscany, Winter Park, Fla.
Van Arsdale, W. L.....22231 W. Outer Drive, Dearborn
Van Becelaere, L. A.....1860 Ford, Wyandotte
VandenBerg, Henry J., Jr.....816 David Whitney Bldg., Detroit 26
Vander, S. A.....12315 Broadstreet, Detroit 4
Van Eck, James E.....9165 Whittier, Detroit 24
Van Hoek, Donald E.....2001 Lancaster, Grosse Pointe Woods 30
Van Hoey, A. F.....19154 James Couzens Hwy., Detroit 21
Vann, C. H.....15645 Fenkell, Detroit 27
Van Raaphorst, L. F.....1306 Kales Bldg., Detroit 26
Van Riper, Steven L.....1490 Iroquois, Detroit 14
Van Slyck, E. J.....2201 E. Jefferson, Detroit 7
Vardon, Edward M.....12897 Woodward Ave., Detroit 3
Vasu, V. O.....4829 Woodward, Detroit 1
Velat, C. A.....Providence Hospital, Detroit 8
Veldhuis, A. H.....Henry Ford Hospital, Detroit 2
Veling, William F.....1060 Fisher Bldg., Detroit 2
Vogel, Hyman A.....29901 Ford Road, Garden City
Vokes, M. D.....10182 Gratiot Ave., Detroit 13
Vonder Heide, E. C.....17190 Strathmore, Detroit 21
Vorwald, A. J.....210 McKinley, Grosse Pointe Farms 36
Vossler, A. E.....825 David Whitney Bldg., Detroit 26
Waddington, Jos. E. G. (E).....3818 Northwestern, Detroit 6
Waggoner, Lyle G.....404 David Whitney Bldg., Detroit 26
Wainger, Max J.....1012 David Broderick Tower, Detroit 26
Wainstock, Michael A.....1508 David Broderick Tower, Detroit 26
Wakeman, Everal M.....22276 Garrison, Dearborn
Waldbott, George L.....2930 W. Grand Blvd., Detroit 2
Walker, George L.....10 Peterboro, Detroit 26
Walker, J. P.....1211 Bishop Road, Grosse Pointe
Walker, Roger V.....1255 David Whitney Bldg., Detroit 26
Walker, Roger V., Jr.....1255 David Whitney Bldg., Detroit 26
Walkowiak, Robert G.....716 Kales Bldg., Detroit 26
Wallace, S. Willard.....7815 E. Jefferson, Detroit 14
Wallaert, A. J.....20861 Mack, Grosse Pointe Woods 36
Walls, Arch.....17201 W. McNichols Road, Detroit
Walser, Howard Carleton....566 Fisher Bldg., Detroit 2
Walsh, Francis P.....205 Professional Bldg., Detroit 1
Walter, Arthur W.....14201 Rutland, Detroit 27
Walter, Floyd J.....18714 Grand River, Detroit 23
Walters, Albert G.....11078 Gratiot Ave., Detroit 5
Waltz, Paul J.....16127 Woodward Ave., Detroit 3
Wangner, William F.....7220 Gratiot Ave., Detroit 13
Ward, C. H.....15800 W. McNichols Rd., Detroit 35
Warner, J. F.....7850 E. Jefferson, Detroit 14
Warner, P. L.....10314 Puritan, Detroit 21
Warren, Irving A.....4100 W. McNichols Rd., Detroit 21
Warren, Max.....20001 Shrewbury, Detroit 21
Warren, Wadsworth.....1144 David Whitney Bldg., Detroit 26
Wasserman, Harold....1328 Maccabees Bldg., Detroit 2
Wassermann, Lewis C.....300 W. McNichols Rd., Detroit 3
Waszak, Charles J.....2501 West Grand Boulevard Detroit 8
Watkins, T. W. (M).....605 Blake St., Killeen, Texas
Watson, Douglas J.....15101 Plymouth Rd., Detroit
Watson, Harwood G.....935 S. Military, Dearborn
Watson, J. Edwin.....2536 W. Grand Blvd., Detroit 8
Watts, Frederick B.....16321 Mack, Detroit
Watts, J. C.....7360 Twelfth St., Detroit 6
Watts, Joseph C.....17140 Muirland, Detroit 21
Watts, J. J. (A).....7360 Twelfth St., Detroit 6
Wayne, Morris A.....18474 Roselawn, Detroit 21
Weaver, Clarence E.....113 Martin Place, Detroit 1
Weaver, Delmar F.....571 Fisher Bldg., Detroit
Weber, Karl.....16400 E. Warren, Detroit 24
Webster, John E.....840 David Whitney Bldg., Detroit 26
Weed, Milton R.....1997 E. Grand Blvd., Detroit 11
Wehenkel, Albert M. (L).....7356 12th St., Detroit 6
Weidner, J. H.....c/o Dearborn Engineering Lab., 21500 Oakwood, Dearborn
Weiner, Maurice B.....20211 Greenfield, Detroit 35
Weingarden, David.....13240 Vassar Drive, Detroit
Weinstein, Jacob.....4237 Grand River Ave., Detroit 8
Weisberg, A. Allen.....20 W. 7 Mile Road, Detroit 3
Weisberg, Harry....15101 W. McNichols Rd., Detroit 21
Weisberg, Jacob....15101 W. McNichols Rd., Detroit 21
Weisenthal, Irvin.....5764 Woodward, Detroit 2
Weiss, C. F.....20323 Mack Ave., Grosse Pointe Woods
Weiss, Casimer P.....10040 Joseph Campau, Detroit 12
Welch, John H.....18550 W. Outer Drive, Dearborn 7
Weller, Charles N.....1650 David Whitney Bldg., Detroit 26
Wells, H. J.....Wayne County Gen'l Hosp., Eloise
Wells, Martha L.....760 Fisher Bldg., Detroit
Weltman, Carl G.....1701 David Whitney Bldg., Detroit 26
Wendel, Jacob S. (L).....744 David Whitney Bldg., Detroit 26
Wenzel, Jacob F.....1006 Kales Bldg., Detroit 26
Werle, Peter Paul.....1420 St. Antoine, Detroit 26
West, H. G.....12739 Puritan, Detroit 27
West, M. E.....6303 Mack Ave., Detroit 7
Weston, Bernard.....19760 Monte Vista, Detroit 21
Weston, E. E.....18101 James Couzens, Detroit 21
Weston, Horace L.....703 Mutual Bldg., Detroit 26

Weston, Jean K.....444 Lodge Drive, Detroit 14
Weyher, Russell F.....5383 Oakman Blvd., Detroit 4
Whalen, Neil J.....1515 David Whitney Bldg., Detroit 26
Wharton, Thomas V.....1809 Oak St., Wyandotte
Wheeler, S. C.....18901 W. Six Mile Rd., Detroit 19
Whelan, Joseph L.....28 West Adams Ave., Detroit 26
Whinnery, Randall A.....752 Fisher Bldg., Detroit 2
Whitcomb, C. E.....15756 Kentfield St., Detroit 23
White, Donald H.....1313 Cleveland, Lincoln Park 25
White, D. L.....534 Neff Lane, Grosse Pointe
White, Milton W.....2329 E. Grand Blvd., Detroit 11
White, Prosper D.....66 Tuxedo, Highland Park
White, Theodore M.....7159 Michigan Ave., Detroit 10
Whitehead, Leston S.....1718 David Whitney Bldg., Detroit 26
Whitehead, Walter K.....413 David Whitney Bldg,. Detroit 26
Whitehouse, F. W.....Henry Ford Hospital, Detroit 2
Whiteley, Robert K.....541-3 David Whitney Bldg., Detroit 26
Whitelock, E. H.....1809 Oak St., Wyandotte
Whitney, Elmer L.....2 Kemberton Dr., Pleasant Ridge
Whitney, Rex E.....5525 W. Chicago Blvd., Detroit 4
Whittaker, A. H.....1427 E. Jefferson, Detroit
Wiant, John L. (M).....425 SW Taylor St., Portland, Ore.
Wiechowski, Henry E.....10345 Joseph Campau, Detroit
Wiener, Israel....13011 W. McNichols Rd., Detroit 35
Wiener, Morton.....612 Kales Bldg., Detroit 26
Wietersen, Fred K.....260 Manor Road, Route 2, Birmingham
Wight, Fred B.....1048 David Whitney Bldg., Detroit 26
Wikiera, Edward S.....15020 Michigan Ave., Dearborn 2
Wilcox, L. F.....110 Professional Bldg., Detroit 1
Wiley, Wm. M.....18603 Moross, Grosse Pointe 36
Wilhelm, Rudolf, 1st Lt. (M)....2128, 1st U. S. Army Hospital, Fort Knox, Kentucky
Wilhelm, Seymour K.....13011 W. McNichols Rd., Detroit 21
Wilkinson, A. P.....974 Fisher Bldg., Detroit 2
Williams, Clarence J.....15324 E. Jefferson Grosse Pte. Park 30
Williams, D. G., Jr.....8540 Twelfth St., Detroit
Williams, Eugene.....10149 Michigan, Dearborn
Williamson, J. G. (A).....3660 McKinley, Dearborn
Williamson, W. A.....4566 Seebaldt, Detroit 4
Wilner, I. A.....17701 W. McNichols Rd., Detroit 35
Wilson, Andrew G.....4741 Spokane. Detroit
Wilson, Gerald A.....4741 Spokane, Detroit 4
Wilson, G. S.....4741 Spokane, Detroit 4
Wilson, M. C.....15439 Harper, Detroit 24
Winnick, Lawrence C.....19120 Snowden, Detroit
Winton, G. J.....1007 David Stott Bldg., Detroit 26
Wise, Robert K.....15801 W. McNichols, Detroit 35
Wishropp, E. A.....227 Kenwood Court, Grosse Pointe
Wittenberg, Arthur A.....7101 W. Chicago, Detroit
Wittenberg, Samson S...934 Maccabees Bldg., Detroit 2
Wittenberg, Sidney S.....4400 Livernois, Detroit 10
Witter, Joseph A.....344 Glendale, Detroit 3
Witus, Carl.....18412 Mack Ave., Detroit 24
Witus, Morris.....9036 Dexter Blvd., Detroit 6
Wolever, T. H.....Iranian Oil Refining Co., Abadan, South Iran
Wolfe, Max O.....7-260 General Motors Bldg., Detroit 2
Wollank, Helen Wilson....15324 E. Jefferson, Detroit 30
Wollenberg, R. A. C. (L)....938 David Whitney Bldg., Detroit 26
Wolter, J. G.....Mt. Carmel Mercy Hosp., Detroit 21
Wood, A. L.....25001 Ford Road, Dearborn
Wood, D. J.....2860 Clark St., Detroit 10
Wood, G. P.....2730 E. Jefferson, Detroit 7
Wood, Kenneth A.....3919 John R, Detroit 1
Wood, W. C.....463 Fisher Bldg., Detroit 2
Woodworth, W. P. (L).....153 E. Elizabeth, Detroit 21
Woolfenden, Joseph B.....16321 Mack Ave., Detroit
Worley, F. M., Jr.....Henry Ford Hospital, Detroit 2
Worzniak, Joseph J.....2312 Biddle St., Wyandotte
Wreggit, Winston R.....79 Highland Ave., Highland Park 3
Wright, C. H.....1549 W. Grand Blvd., Detroit 8
Wruble, Joseph.....411 Seldon, Detroit
Wunsch, Richard E.....7815 E. Jefferson, Detroit 14

Yamasaki, Ken.....1514 David Broderick Tower, Detroit 26
Yarrows, Morton.....455 Medbury, Detroit
Yates, Arthur J. W.....8045 E. Jefferson, Detroit
Yesayian, H. G.....609 Kales Bldg., Detroit 26
Yetzer, William J.....511 Professional Bldg., Detroit 2
Yoder, R. R.....41001 E. Seven Mile Road, Northville
Yott, William J.....854 Lakeshore Drive, Grosse Pointe
Young, Donald A.....14807 W. McNichols, Detroit
Young, Donald C.....1151 Taylor Ave., Detroit 2
Young, I. I.....Detroit Receiving Hospital, Detroit 26
Young, Lloyd B.....857 Fisher Bldg., Detroit 2
Young, Viola M.....10 Peterboro, Detroit 1
Young, Watson A., Maj. M.C. (M)....97th Gen. Hosp., APO 757, New York, N. Y.
Youngstrom, Clarence.....15711 Birwood, Detroit 38

Zabinski, Edward J.....19136 Van Dyke, Detroit 34
Zawacki, Sigmund.....22214 Ford Road, Dearborn
Zawadzki, E. S.....14961 Piedmont Ave., Detroit
Zbikowski, Joseph.....Wayne Co. General Hosp., Eloise
Zbikowski, Z. T.....Wayne County General Hosp., Eloise
Zbudowski, Myron R.....10040 Joseph Campau, Hamtramck 12
Zemaitris, Petras.....8318 Whittaker, Detroit 9
Zemens, Joseph L.....13061 E. Eight Mile Road, East Detroit
Ziegler, Robert F.....Henry Ford Hospital, Detroit
Zielinski, C. J.....7341 W. Warren, Detroit 10
Zinn, George H.....641 David Whitney Bldg., Detroit 26
Zinterhofer, John....27621 Santa Barbara Drive, Rte. 6, Birmingham
Zolliker, Margaret Z.....20390 Harper Ave., Detroit
Zonnis, Marian E.....1064 Fisher Bldg., Detroit 2
Zuelzer, Wolfgang W.....Children's Hospital, Detroit
Zukowski, Henry J.....1916 Manchester Blvd., Grosse Pointe Woods 30
Zukowski, Sigmund A.....6626 Van Dyke, Detroit 13

WEXFORD COUNTY

Bentley, M. D.....120½ E. Cass St., Cadillac
Cardinal, T. H.....212 S. Simons St., Cadillac
Daugharty, Robert V.....302 E. Chapin, Cadillac
Holm, Augustus (L).....828 Seventeenth St., Moline, Illinois
Inman, J. C.....Lake City
Lommen, Ralph G.....Manton
Moon, William W.....826 Oak Street, Cadillac
Moore, Gregory P.....302 E. Chapin, Cadillac
Murphy, Michael R.....120 E. Cass Street, Cadillac
Paye, Philip H.....311 Evart, Cadillac
Peterson, W. D.....Box 58, Mesick
Posthuma, Millard M.....423 E. Cass Street, Cadillac
Purdy, Calvin S. (L).....Buckley
Seger, D. W.....Lake City
Smith, Wallace J.....East Harris Street, Cadillac
Stokes, William H.....Lake City
Tornberg, Gordon C.....124 E. Cass Street, Cadillac
Youngman, D. C.....Marion

HONORARY MEMBERS

Brake, D. Hale.....Stanton
Cline, John W.....3467 Pacific Avenue, San Francisco, Calif.
de Kruif, Paul, Ph.D.....Wake Robin, Holland
Johnson, Donald E., Mr.....207 E. First Street, Flint
Kahlke, Charles E.....Benton Harbor
Upjohn, Lawrence N.....Upjohn Company, 301 Henrietta Street, Kalamazoo

Woman's Auxiliary

Directory of Members, 1956

ALLEGAN COUNTY

Brachman, Mrs. Peter.....352 Cutler, Allegan
Brown, Mrs. L. F.....451 W. Allegan, Otsego
Clark, Mrs. James.....Box B, Fennville
Corkill, Mrs. C. C.....Douglas
DeWitt, Mrs. Donald.....160 Taylor, Saugatuck
Goude, Mrs. Gordon.....Hopkins
Johnson, Mrs. E. B.....Rural Rte., Allegan
Mahan, Mrs. James.....400 Trowbridge, Allegan
Miller, Mrs. Kenneth.....Douglas
Mitchell, Mrs. A. B.....River View Park, Allegan
Ramseyer, Mrs. Gladwin.....421 Morrel St., Plainwell
Rickert, Mrs. Ruth.....319 River St., Allegan
Schneiter, Mrs. Harry E.....311 Cutler St., Allegan
Vander Kolk, Mrs. Bert.....Box 236, Hopkins

BAY COUNTY

Alcorn, Mrs. Kent.....2211 McKinley St., Bay City
Alcorn, Mrs. Marshall.....210 Pendleton, Bay City
Allen, Mrs. A. D.....4151 Two Mile Rd., RFD, Bay City
Andrews, Mrs. F. T.....1414 McKinley, Bay City
Asline, Mrs. J. N.....310 Valerie Ct., Essexville
Baird, Mrs. Fred.....30 Hendrick Dr., Lagoon Beach, Bay City
Bowman, Mrs. David A.....1917 Fifth St., Bay City
Brown, Mrs. G. M.....2257 Carroll Rd., Bay City
Campbell, Mrs. John.....1838 McKinley, Bay City
Chapin, Mrs. F. J.....2121 Center St., Bay City
Connelly, Mrs. C. J.....1004 Borton Ave., Essexville
Cook, Mrs. Hugh.....1526 Helen St., Bay City
Cosens, Mrs. Stanley A.....701 Webb, Bay City
Criswell, Mrs. R. H.....1412 Center Ave., Bay City
DeWaele, Mrs. Paul.....1106 N. Johnson St., Bay City
Drummond, Mrs. Fred.....Kawkawlin
Dumond, Mrs. V. H.....1700 Fifth, Bay City
Ellison, Mrs. Alfred.....2010 Second St., Bay City
Foster, Mrs. L. F.....605 Ames, Bay City
Freel, Mrs. J. A.....2202 Eleventh St., Bay City
Gale, Mrs. H. M.....1900 Center Ave., Bay City
Gamble, Mrs. W. G.....1303 Fifth Ave., Bay City
Gehman, Mrs. Robert.....Omer
Hagelshaw, Mrs. G. L.....1203 Fifth Ave., Bay City
Heuser, Mrs. Harold.....2021 Sixth St., Bay City
Hickner, Mrs. Laurence.....1715 33rd St., Bay City
Horowitz, Mrs. S. F.....Sovereign Dr., Bay City
Howland, Mrs. Walter.....Pinconning
Huckins, Mrs. E. S.....436 Cass Ave., Bay City
Huckins, Mrs. Roger.....404 Trumbull St., Bay City
Jacoby, Mrs. A. H.....2202 Ninth, Bay City
Jens, Mrs. Otto.....1506 Prairie, Essexville
Johnson, Mrs. O. J.....105 Parkwood, Bay City
Jones, Mrs. Culver.....1024 Rosemary Lane, Essexville
Knobloch, Mrs. H. T.....1911 Center, Bay City
Kulinski, Mrs. Eugene.....207 Huron, Bay City
Langin, Mrs. John.....2116 Seventh St., Bay City
MacRae, Mrs. L. D.....813 N. Sherman St., Bay City
McDonnell, Mrs. W. R.....Box 600, Pinconning
McEwan, Mrs. J. H.....2310 Nurmi Drive, Bay City
McGee, Mrs. Harry.....204 N. Mountain, Bay City
McLurg, Mrs. John.....1900 Center, Bay City
Medvesky, Mrs. M. J.....314 Hill St., Bay City
Miller, Mrs. Edwin C.....614 Nurmi Ct., Bay City
Moore, Mrs. Neal.....2141 Fifth St., Bay City
Mosier, Mrs. D. J.....307 W. Midland, Bay City
Pearson, Mrs. S. M.....501 W. Jenny St., Bay City
Pelczar, Mrs. Walter.....321 N. Johnson, Bay City
Perkins, Mrs. R. C.....2118 Fifth Ave., Bay City
Reddick, Mrs. Charles.....2015 Seventh St., Bay City
Reed, Mrs. William.....2230 Groveland, Bay City
Reuter, Mrs. C. W.....5561 Gaertner Ct., Bay City
Ruggles, Mrs. F. E.....605 N. Lincoln St., Bay City
Shafer, Mrs. Harold C.....324 Green St., Bay City
Slattery, Mrs. M. R.....2215 McKinley, Bay City
Staley, Mrs. Hugh.....Omer
Stinson, Mrs. Walter S.....4216 Ann Court, Bay City
Swantek, Mrs. Chas.....240 Washington, Bay City
Switzer, Mrs. L. W.....2150 Second St., Bay City
Taheri, Mrs. Zai.....2712 S. Westgate Dr., Bay City
Tarter, Mrs. C. S.....1712 Center Ave., Bay City
Taylor, Mrs. Robert.....4656 Richardson Dr., Bay City
Tompkins, Mrs. Dana.....Pinconning
Urmston, Mrs. P. R.....1862 McKinley St., Bay City
Wilcox, Mrs. J. W.....210 Gates, Bay City
Wilson, Mrs. T. G.....414 N. Farragut St., Bay City
Wittwer, Mrs. E. A.....Detroit
Woodburne, Mrs. H. L.....1107 Borton, Essexville
Wright, Mrs. Thomas.....531 Handy Dr., Bay City
Zaremba, Mrs. A. J.....108 S. Madison St., Bay City
Ziliak, Mrs. A. L.....3393 Kiesel Road, Bay City

BERRIEN COUNTY

Bailey, Mrs. John.....2150 Samuel, Benton Harbor
Beal, Mrs. Gerald.....114 Hawthorne, St. Joseph
Bliesmer, Mrs. August.....2108 Morton Ave., St. Joseph
Bronfenbrenner, Mrs. J.....2218 Harriet, St. Joseph
Bush, Mrs. C. W.....1728 Broadway, Niles
Butler, Mrs. William J.....2216 Lakeview, St. Joseph
Cawthorne, Mrs. H. J.....192 Robbins, Benton Harbor
Chickering, Mrs. W. A.....205 E. Delaware Benton Harbor
Conybeare, Mrs. R. C.....234 Orchard Lane, Benton Harbor
Cooper, Mrs. W. L.....901 Wisconsin, St. Joseph
Cowdery, Mrs. K. H.....1620 Niles Ave., St. Joseph
Crowell, Mrs. Richard C.....1920 Sunset Court, St. Joseph
Eglhammer, Mrs. R. M.....Highland, St. Joseph
Elliott, Mrs. J. C.....111 Chippewa, Buchanan
Emery, Mrs. Clayton S.....1329 Lake Blvd., St. Joseph
Emery, Mrs. William.....2932 Lakeview, St. Joseph
Faber, Mrs. Michael.....176 W. Napier, Benton Harbor
Fattic, Mrs. G. R., Jr.....806 E. 3rd St., Niles
Feeley, Mrs. Marshall.....2930 Lake View Ave., St. Joseph
Galles, Mrs. James.....1919 Heath Court, Benton Harbor
Garrett, Mrs. E. L.....M-40, Rt. 3, Niles
Hassan, Mrs. Kent.....606 Rynearson, Buchanan
Hayes, Mrs. T. P.....1614 Forres Ave., St. Joseph
Hershey, Mrs. N. J.....1648 Broadway, Niles
Howard, Mrs. Frank.....808 Columbus, Benton Harbor
Irgens, Mrs. E. R.....910 Kingsley, St. Joseph
Johnston, Mrs. W.....512 Sutherland, St. Joseph
Kelsall, Mrs. Harvey I.....900 Wolcott Ave., St. Joseph
Kennedy, Mrs. Francis.....582 Pearl, Benton Harbor
King, Mrs. B. B. 1290 Seneca, Benton Harbor
Klos, Mrs. Henry.....2121 Niles Ave., St. Joseph

Landgraf, Mrs. Robert L.....527 W. Main, Niles
Lindenfeld, Mrs. Fred H.....443 S. St. Joseph, Niles
Lininger, Mrs. Richard.....1639 Shawnee Dr., Benton Harbor
Manning, Mrs. John.....1611 Forres Ave., St. Joseph
Mesirow, Mrs. Stanley M.....150 Smith Ct., Benton Harbor
Moore, Mrs. Scott.....1649 Broadway, Niles
Parker, Mrs. L. B.....614 N. Main, Berrien Springs
Porter, Mrs. Charles.....1589 Colfax, Benton Harbor
Pritchard, Mrs. H. M.....1603 Ferry, Niles
Rague, Mrs. Paul.....1287 Seneca, Benton Harbor
Ray, Mrs. Dean.....2019 Langley, St. Joseph
Reagan, Mrs. Robert.....232 Windsor, Benton Harbor
Rice, Mrs. Franklyn, Jr.....324 N. 4th St., Niles
Richmond, Mrs. Dean....218 Sunnybank Road, St. Joseph
Ruth, Mrs. J. Griswold.....507 E. Britain, Benton Harbor
Skinner, Mrs. James.....2716 Thayer, St. Joseph
Sowers, Mrs. B. F.....Higman Park, Benton Harbor
Strayer, Mrs. J. C.....103 Moccasin, Buchanan
Strayer, Mrs. John C., Jr.,.....553 Grant St., Niles
Strick, Mrs. M. H.....1759 Commonwealth, Benton Harbor
Swingle, Mrs. Alvin J...North Shore Dr., Benton Harbor
Thorup, Mrs. D. W.....1160 Miami Rd., Benton Harbor
Vastine, Mrs. R. J., Jr.....430 W. Chicago, Buchanan
Westervelt, Mrs. Herbert O.....539 Pearl St., Benton Harbor
Winegar, Mrs. Alvin C.....797 Pipestone, Benton Harbor
Woodford, Mrs. Hackley E.....255 Oden, Benton Harbor

BRANCH COUNTY

Aldrich, Mrs. N. S.....162 Marshall St., Coldwater
Bailey, Mrs. J. E.....291 E. Chicago St., Coldwater
Beck, Mrs. P. C.....253 N. Walker, Bronson
Coates, Mrs. Carl.....Rt. 1, Quincy
Culver, Mrs. Bert W.....72 Division St., Coldwater
Culver, Mrs. D. T.....78 Division St., Coldwater
Fraser, Mrs. Robert J.....156 E. Chicago, Coldwater
Gist, Mrs. Lemuel I.....80 N. Sprague, Coldwater
Gomley, Mrs. Henry G.....435 W. Chicago, Bronson
Harris, Mrs. D. M.....25 N. Fremont St., Coldwater
Heffelfinger, Mrs. J. C.....150 Liberty, Coldwater
Leitch, Mrs. Robert M.....Union City
Mitchell, Mrs. H. C.....State Home & Training School, Coldwater
Mooi, Mrs. H. Roy.....20 Fairfield, Coldwater
Moss, Mrs. H. L.....86 W. Clarke St., Coldwater
Nettleman, Mrs. William....136 E. Pearl St., Coldwater
Rennell, Mrs. E. J.....State Home & Training School Coldwater
Rick, Mrs. John.....59 N. Circle, Coldwater
Smith, Mrs. Robert.....Union City
Thomas, Mrs. J. A.....390 E. Chicago, Coldwater
Wade, Mrs. R. L.....144 E. Chicago, Coldwater
Walton, Mrs. N. J.....61 E. Chicago, Quincy
Weidner, Mrs. Harold R.,.....16 S. Fremont, Coldwater

CALHOUN COUNTY

Albright, Mrs. A. A.....Rt. 3, Box 266H, Bellevue
Amos, Mrs. N. H.....191 Waubascon Rd., Battle Creek
Baribeau, Mrs. Roy.....1003 Capital Ave., S.W., Battle Creek
Becker, Mrs. H. F.....Rt. 3, Box 303A, Battle Creek
Berghorst, Mrs. John.....Veterans Administration Hosp., Battle Creek
Beuker, Mrs. Herman.....501 N. Kalamazoo, Marshall
Bodine, Mrs. Harold.....396 Country Club Dr,. Battle Creek
Bonifer, Mrs. Philip.....93 Clinton Dr., Battle Creek
Brainard, Mrs. Clifford.....612 Jennings Landing, Battle Creek
Brown, Mrs. Robert W.....106 Circle Dr., Battle Creek
Campbell, Mrs. Jack....203 Highland Ave., Battle Creek
Campbell, Mrs. R. J.....209 Emmett St., Battle Creek
Capron, Mrs. M. J.....102 Ann Ave., Battle Creek
Chandler, Mrs. Edward.....55 N. Broad, Battle Creek
Chynoweth, Mrs. W. R.....88 Ann Ave., Battle Creek
Coakes, Mrs. J. E.....716 Gorham St., Marshall
Colquhoun, Mrs. Graham F.....6 Country Club Dr. Battle Creek
Diamante, Mrs. Paul.....26 Maryland Dr., Battle Creek
Ferazzi, Mrs. Patrick..309 Bittersweet Lane, Battle Creek
Finch, Mrs. D. L.....72 Jennings Rd., Battle Creek
Fisher, Mrs. Robert E.....1501 W. Michigan Ave., Battle Creek
Fraser, Mrs. Robt. H.....198 Fremont St., Battle Creek
Glynn, Mrs. J. H.....Post Tavern Hotel, Battle Creek
Graubner, Mrs. F. L.....707 N. Linden, Marshall
Hansen, Mrs. Harvey C.....80 County Club Dr., Battle Creek
Heald, Mrs. C. W.....67 Oaklawn, Battle Creek
Herman, Mrs. L.....Veterans Administration, Battle Creek
Hibbs, Mrs. Don.....117 Sunnyside, Battle Creek
Holtom, Mrs. B. G.....78 Merwood Dr., Battle Creek
Hubly, Mrs. James.....644 Country Club Dr., Battle Creek
Humphrey, Mrs. Arthur.....788 Country Club Dr. Battle Creek
Jeffrey, Mrs. J. R.....62 Ann Ave., Battle Creek
Jones, Mrs. Aubrey H.....Veterans Administration Hosp., Battle Creek
Keagle, Mrs. L. R.....41 Garrison, Battle Creek
Kelleher, Mrs. Geo. T.....65 Sherman Rd., Battle Creek
Kimball, Mrs. Arthur S.....196 Capital Ave., N.E., Battle Creek
Kinde, Mrs. M. R.....48 Merwood Dr., Battle Creek
Kingsley, Mrs. Paul.....29 Woodmer Lane, Battle Creek
Kolvoord, Mrs. Theodore....47 Minges Rd., Battle Creek
LaFrance, Mrs. N. F.....Veterans Administration, Battle Creek
Lam, Mrs. Francis L.....151 Sunnyside Dr., Battle Creek
Lancaster, Mrs. Vance B.....119 Ridgeway Dr., Battle Creek
Leitch, Mrs. Robert.....Union City
Levy, Mrs. Joseph, Jr.....343 Orchard Ave., Battle Creek
Lowe, Mrs. K. H.....Rt. 1, Box 38, Augusta
Lowe, Mrs. Stanley.....12 Hiawatha Dr., Battle Creek
Marino, Mrs. S. G.....Veterans Administration, Battle Creek
McCuaig, Mrs. Alfred.....145 Pleasant View Dr., Battle Creek
Meister, Mrs. Franklin O.....315 Orchard Ave., Battle Creek
Melges, Mrs. Fred J.....314 N. Orchard St., Battle Creek
Morrison, Mrs. D. B.....199 Chestnut, Battle Creek
Mullenmeister, Mrs. Hugh F.....275 Capital Ave. N.E., Battle Creek
Olsen, Mrs. A. L...Veterans Administration, Battle Creek
Orr, Mrs. E. H.....Veterans Administration Hosp., Battle Creek
Parkinson, Mrs. C. E.....Rt. 3, Box 506, Battle Creek
Patrick, Mrs. Gilbert T...16 Hiawatha Dr., Battle Creek
Pearson, Mrs. D. J.....32 Hiawatha Dr., Battle Creek
Powers, Mrs. John.....206 Orchard Ave., Battle Creek
Robbert, Mrs. John.....164 Francis Dr., Battle Creek
Robins, Mrs. Hugh.....237 Fremont, Battle Creek
Rosenfeld, Mrs. Jos.....70 Elizabeth St., Battle Creek
Royer, Mrs. Clark.....126 Sunnyside Dr., Battle Creek
Sandy, Mrs. W. A.....Vets. Adm., Fort Custer Battle Creek
Schwarz, Mrs. Frank 31 Orchard, Battle Creek

Shellenberger, Mrs. H. M.....131 W. Hanover, Marshall
Sharp, Mrs. W. T.....Veterans Administration, Battle Creek
Shipp, Mrs. Leland P.....611 Jennings Landing, Battle Creek
Simpson, Mrs. Robert S.....135 Shadywood Lane, Battle Creek
Slagle, Mrs. Geo. W.....1702 Capital S.W., Battle Creek
Sleight, Mrs. James.....Rt. 3, Box 305B, Battle Creek
Smith, Mrs. J. S. Veterans Administration Hosp., Battle Creek
Smith, Mrs. R. L.....681 Capital Ave. S.W., Battle Creek
Stadle, Mrs. W. H.....607 Jennings Landing, Battle Creek
Stifel, Mrs. R. A...260 Wahwahtaysee Way, Battle Creek
Tazelaar, Mrs. Myron A.....219 N. Madison, Marshall
Van Sandt, Mrs. Max M.....252 Garfield Ave., Battle Creek
Verity, Mrs. L. E.....64 St. Joseph Lane, Battle Creek
Walters, Mrs. J. F.....265 Sherman Rd., Battle Creek
Way, Mrs. Kenneth.....315 N. Madison, Marshall
Wemmer, Mrs. Keith S.....94 Barney, Battle Creek
Wencke, Mrs. Carl G.....127 Park Place, Country Club Hills, Battle Creek
Williams, Mrs. Edwin G.....271 Chestnut, Battle Creek
Winslow, Mrs. Sherwood..20 Hiawatha Dr., Battle Creek
Whitney, Mrs. J. M.....622 W. Michigan, Battle Creek
Worgess, Mrs. Duane.....45 W. Territorial Rd., Battle Creek
Yannitelli, Mrs. S. A.....132 W. Hamilton Lane, Battle Creek
Zheutlin, Mrs. Bertram....119 Grand Blvd., Battle Creek

CHIPPEWA-MACKINAC-LUCE COUNTIES

Allott, Mrs. H. R.....607 Sheridan Dr., Sault Ste. Marie
Blain, Mrs. J. G.....130 Park Place, Sault Ste. Marie
Blair, Mrs. H. M.....811 Summitt St., Sault Ste. Marie
Clausen, Mrs. C. H.....3108 Lakeshore Dr., Sault Ste. Marie
Cowan, Mrs. D. A.....Riverside Dr., Sault Ste. Marie
Finlayson, Mrs. Donald D.....903 Prospect St., Sault Ste. Marie
Goddard, Mrs. G. B.....405 Dawson St., Sault Ste. Marie
Harrington, Mrs. H. M.....3308 Lakeshore Dr., Sault Ste. Marie
Mackie, Mrs. T. B.....208 Mission Rd., Sault Ste. Marie
Montgomery, Mrs. B. T.....U. S. 2, Sault Ste. Marie
Rhind, Mrs. Earl....604 Johnstone St., Sault Ste. Marie
Scott, Mrs. D. F.....506 Ravine St., Sault Ste. Marie
Townsend, Mrs. Jack....1111 Young St., Sault Ste. Marie
Thompson, Mrs. T. W.....Newberry
Trapasso, Mrs. T. J.....208 Mission Rd., Sault Ste. Marie
Veneir, Mrs. Anthony.....1021 Parnell Ave., Sault Ste. Marie
Yale, Mrs. I. V.....408 Carrie St., Sault Ste. Marie

CLINTON COUNTY

Bennett, Mrs. G. W.....203 W. Main, Elsie
Cook, Mrs. Bruno.....Westphalia
Elliott, Mrs. Bruce R. Ovid
Foo, Mrs. Charles T.....110 E. McConnell, St. Johns
Geib, Mrs. O. P.....Carson City
Grost, Mrs. James 303 E. Walker, St. Johns
Henthorn, Mrs. A. C.....Rt. 3, St. Johns
Kirker, Mrs. J. Gilmore.....Box 68, Fowler
McWilliams, Mrs. Wm. B.....Maple Rapids
Russell, Mrs. Sherwood.....104 N. Oakland, St. Johns
Sheline, Mrs. V. Lowell.....S. St. Johns St., Ithaca
Slagh, Mrs. E. M.....217 S. Ovid, Elsie
Smith, Mrs. F. W.....200 State St., St. Johns
Stephenson, Mrs. W. F.....510 E. Walker, St. Johns
Stoller, Mrs. Paul.....308 N. Mead St., St. Johns

DELTA-SCHOOLCRAFT COUNTIES

Anderson, Mrs. Francis.....1012 S. 11th St., Escanaba
Bernier, Mrs. A. B.....547 Michigan Ave., Manistique
Dehlin, Mrs. J. R.....1225 Minnesota Ave., Gladstone
Frenn, Mrs. N. J.....1701 10th Ave., Escanaba
Groos, Mrs. Harold.....421 Ogden, Escanaba
Groos, Mrs. Louis.....1015 S. 1st Ave., Escanaba
Jensen, Mrs. Carrol.....530 Gero Ave., Manistique
LeMire, Mrs. D. F.....1813 Lake Shore Dr., Escanaba
LeMire, Mrs. W. A.....318 Lake Shore Dr., Escanaba
Lindquist, Mrs. N. L.....1815 Lake Shore Dr., Escanaba
McInerney, Mrs. T. A.....1029 S. 13th St., Escanaba
Nagy, Mrs. Charles.....Bark River
Olson, Mrs. Carl.....623 Michigan Ave., Gladstone
Ryde, Mrs. R. E.....750 Lakeshore Dr., Escanaba
Walch, Mrs. John J.....800 Lakeshore Dr., Escanaba
Waters, Mrs. Duane.....Lake St., Manistique
Wehner, Mrs. Merle D.....101 Lake St., Manistique

DICKINSON-IRON COUNTIES

Addison, Mrs. E. R.....601 State St., Crystal Falls
Alexander, Mrs. Wm. H.....411 East "C" St., Iron Mountain
Anderson, Mrs. D. T.....408 Hamilton, Kingsford
Boyce, Mrs. George H.....East "D" St., Iron Mountain
Carlson, Mrs. Ralph E...615 E. "C" St., Iron Mountain
Cecconi, Mrs. Richard D.....801 Kent, Iron Mountain
Cooper, Mrs. C. A.....407 Third, Stambaugh
Gladstone, Mrs. William.....626 Saginaw, Norway
Huron, Mrs. W. H.....215 W. "E" St., Iron Mountain
Irvine, Mrs. L. E.....Sunset Lake, Iron River
McEachran, Mrs. H. D.....401 East "C" St., Iron Mountain
Palm, Mrs. Theodore E.....609 Marquette, Crystal Falls
Retallack, Mrs. R. C.....621 W. Genesee, Iron River
Schmutzler, Mrs. W. A.....373 Woodward, Kingsford
Schroeder, Mrs. J. M.....1111 Stockbridge, Iron Mountain
Smith, Mrs. D. R.....817 W. Brown, Iron Mountain
Steinke, Mrs. Charles.....600 Hamilton, Kingsford

EATON COUNTY

Arner, Mrs. Fred L.....Bellevue
Brown, Mrs. B. Philip.....337 S. Cochran, Charlotte
Carothers, Mrs. Daniel F.....243 S. Sheldon, Charlotte
Cook, Mrs. J. M.....404 W. Harris, Charlotte
DeLand, Mrs. C. L.....Bellevue
Engle, Mrs. Paul Olivet
Hannah, Mrs. Harry W.....Rt. 3, Charlotte
Landick, Mrs. Robert.....138 S. Bostwick, Charlotte
Meinke, Mrs. Richard K.....Eaton Rapids
Moyer, Mrs. H. A.....Rt. 3, Charlotte
Myers, Mrs. A. W.....229 Potterville Rd., Potterville
Riley, Mrs. Joseph 324 Horatio Ave., Charlotte
Sevener, Mrs. Lester G.....608 W. Stoddard, Charlotte
Van Ark, Mrs. Bert.....Eaton Rapids
Van Ark, Mrs. Herman F.....Eaton Rapids
Willits, Mrs. Clayton O.....127 Upland Ave., Charlotte

Adams, Mrs. Burnell.....609 S. Lynch, Flint
Adams, Mrs. Chester.....610 E. Grand Blanc Rd., Grand Blanc
Anderon, Mrs. Harley.....11820 N. Saginaw, Mt. Morris
Anderson, Mrs. John L.....6227 River Rd., Flushing
Andrews, Mrs. N. A. C.....310 E. Main St., Flushing
Anthony, Mrs. George.....912 Beard, Flint
Baird, Mrs. C.....1818 Ramsey Blvd., Flint
Barbour, Mrs. Fleming.....2015 Lincoln Dr., Flint
Baske, Mrs. Franklin.....923 Maxine, Flint
Bateman, Mrs. L. G.....1708 E. Second, Flint
Benson, Mrs. John, Jr.....1410 E. Court, Flint
Berman, Mrs. Harry.....927 Beard St., Flint
Bernstein, Mrs. Eli.....3211 Westwood Pkwy., Flint
Best, Mrs. John.....3712 Brownell, Flint
Beyer, Mrs. George.....3329 Elmwood, Clio
Bird, Mrs. W. G.....133 Odette, Flint
Bishop, Mrs. D. L.....1024 Woodside Dr., Flint
Bogart, Mrs. Leon.....1125 South Dr., Flint
Boles, Mrs. William.....1407 Woodcroft, Flint
Bonathan, Mrs. A. T.....3002 Parkside Dr., Flint
Botsdorf, Mrs. John.....10114 Hegel, Goodrich
Branch, Mrs. Hira.....1014 Woodside, Flint
Brasie, Mrs. Donald.....310 Josephine, Flint
Bruce, Mrs. William.....5397 Miller Rd., Swartz Creek
Bryant, Mrs. Donald.....405 W. Witherbee, Flint
Buchanan, Mrs. William.....902 S. Leroy, Fenton
Chambers, Mrs. Myrton.....3402 Westwood Pkwy., Flint
Charters, Mrs. John.....11089 Fenton Rd., Fenton
Chase, Mrs. William.....1318 N. Ballenger Rd., Flint
Clark, Mrs. Robert.....2602 Thomas, Flint
Collins, Mrs. James.....902 Stockdale, Flint
Colwell, Mrs. Clifford W.....2011 Briar Hill, Flint
Connell, Mrs. J. T.....Coldwater Road Rt. 1, Flint
Conover, Mrs. George.....G-1152 N. Dye Rd., Flint
Conover, Mrs. Sidney.....G-4349 Fenton Rd., Flint
Cook, Mrs. Henry.....1825 Chelsea Circle, Flint
Credille, Mrs. Barney.....2020 E. Second, Flint
Currey, Mrs. G.....3021 Westwood Pkwy., Flint
Curtin, Mrs. John.....915 E. Court St., Flint
Cutler, Mrs. Campbell.....1502 Lavender, Flint
Davis, Mrs. Robert.....407 Fremont, Flint
Dawson, Mrs. Ralph E.....1617 Linwood Ave., Flint
Del-Zingro, Mrs. Nicholas.....Davison
Dickstein, Mrs. Bernard.....1110 W. Hamilton, Flint
Dimond, Mrs. E. G.....G-5046 McCandlish Rd., Grand Blanc
Dodds, Mrs. Max.....1718 Kenwood, Flint
Dorsey, Mrs. Philip.....G-1334 N. Dye Rd., Flint
Drewyer, Mrs. Glenn.....5327 W. Reid Rd., Swartz Creek
Dykewicz, Mrs. Richard.....3117 Sunset Dr., Flint
Eichhorn, Mrs. Ernest.....1301 Riverdale Rd., Flint
Eickhorst, Mrs. Thomas.....951 Welch, Blvd., Flint
Elliott, Mrs. H. B.....2380 Nolen Dr., Flint
Engleman, Mrs. Raymond.....3710 Sherwood Dr., Flint
Ettinger, Mrs. Ralph.....409 South East, Fenton
Farah, Mrs. Ben.....342 Bradley, Flint
Farhat, Mrs. Maynard.....1901 Hampden Rd., Flint
Fee, Mrs. Manson.....1002 Maxine, Flint
Finkelstein, Mrs. T.....1633 Seminole St., Flint
Flynn, Mrs. Southard.....2354 Nolen Dr., Flint
Forrer, Mrs. Graydon.....124 W. 4th St., Flint
Gellenger, Mrs. Stephen.....2125 Detroit, Flint
Gleason, Mrs. N. A.....1309 Blanchard, Flint
Golden, Mrs. H. M.....1511 Woodcroft, Flint
Gorne, Mrs. S. S.....1009 Woodside Dr., Flint
Grady, Mrs. Donald.....1515 Woodslea, Flint
Griffin, Mrs. Ernest, Jr.....1505 Arrow Lane, Flint
Grover, Mrs. H. F.....3509 Norwood Dr., Flint
Guile, Mrs. Gurdon.....1621 Dupont, Flint
Gundry, Mrs. George....11736 S. Saginaw, Grand Blanc
Gutow, Mrs. I. H.....3020 Westward Pkwy., Flint
Gutow, Mrs. J. J.....3759 Sunset Dr., Flint
Hackley, Mrs. Richard.....422 Grace St., Flint
Hague, Mrs. Robert.....8231 River Rd., Flushing
Harper, Mrs. A. W.....712 Thompson St., Flint
Harper, Mrs. Homer.....713 Thompson St., Flint
Hauser, Mrs. Fred.....1027 Manning Court, Flint
Hennesey, Mrs. Charles.....3515 Sherwood, Flint
Hiscock, Mrs. Harold.....2021 Briar Hill, Flint
Hooper, Mrs. Kendall.....3460 Hawthorne Dr., Flint
Hubbard, Mrs. Wm.....1205 Maxine, Flint
Hufton, Mrs. W. L.....2546 Nolen Dr., Flint
Hurd, Mrs. Clayton.....300 Robert St., Fenton
Jaarsma, Mrs. Raymond.....928 Woodside Dr., Flint
Jackson, Mrs. Donald.....312 Elmwood Dr., Davison
James, Mrs. Robert.....3001 S. Saginaw, Flint
Jermstad, Mrs. Robert.....623 Third Ave., Flint
Johnson, Mrs. Frank.....235 W. Hamilton, Flint
Johnson, Mrs. Frank D.....11069 Clio Rd., Clio
Johnson, Mrs. Raymond.....5173 W. Reid Rd., Swartz Creek
Judd, Mrs. Alvin.....2912 Circle Dr., Flint
Kaufman, Mrs. L. D.....1617 Neome Dr., Flint
Knapp, Mrs. Don.....712 Mann Ave., Flint
Knapp, Mrs. Wm.....1138 Woodside Dr., Flint
Kretchmar, Mrs. Arthur.....G-1135 N. Dye Rd., Flint
Kurtz, Mrs. John J.....G-2391 Reid Rd., Flint
LeMieux, Mrs. Leslie.....2801 Norbert Dr., Flint
Lewis, Mrs. Thomas.....4047 Mitchell Dr., Flint
Limbach, Mrs. David.....308 W. Shiawassee, Fenton
Livesay, Mrs. Jackson.....702 Blanchard St., Flint
Lukens, Mrs. John.....1317 W. Genesee, Flint
Lyttle, Mrs. Sydney.....4005 Sterling, Flint
MacGregor, Mrs. Delbert....722 W. Hamilton Ave., Flint
Macksood, Mrs. Joseph.....3340 Parkside Dr., Flint
Marsh, Mrs. Elizabeth.....312 Buckingham, Flint
Marshall, Mrs. Sophie....P.O. Box 885, Olympia, Wash.
McLeod, Mrs. Kenneth.....1001 Welch Blvd., Flint
McTaggart, Mrs. David.....2401 Windemere, Flint
Michael, Mrs. Sydney.....922 Welch Blvd., Flint
Michels, Mrs. Robert....409 N. McKinley Rd., Flushing
Michelson, Mrs. Richard.....2509 E. Court St., Flint
Miltich, Mrs. Anthony.....2222 Colfax, Flint
Miner, Mrs. F. B.....1000 E. Seventh St., Flint
Moore, Mrs. Kenneth.....2717 Circle Dr., Flint
Morrison, Mrs. William.....205 Perry Rd., Grand Blanc
Morrissey, Mrs. Vaughn.....101 Stockdale, Flint
Mosier, Mrs. Edward.....1730 Overhill Dr., Flint
Murphy, Mrs. Grant.....G-7316 Calkins, Flint
Neiswander, Mrs. Paul.....2552 Thomas, Flint
Nicholls, Mrs. William.....168 E. Stewart, Flint
Odle, Mrs. I. D.....201 Welch Blvd., Flint
Orr, Mrs. Walter.....13396 Enid Blvd., Fenton
Osher, Mrs. Seymour.....915 E. Court, Flint
Pfeifer, Mrs. A. C.....12205 N. Saginaw Rd., Mt. Morris
Phelps, Mrs. Lynn.....Goodrich Hospital, Goodrich
Phillips, Mrs. Robert.....2613 Thomas, Flint
Pickering, Mrs. Woodrow.....1602 N. Ballenger, Flint
Portney, Mrs. Jack.....1818 E. Court, Flint
Preston, Mrs. Otto.....1315 Maxine, Flint
Rapport, Mrs. Richard.....2306 Miller Rd., Flint
Rawling, Mrs. John.....1817 Bayberry, Flint
Rawlings, Mrs. J. Mott.....1601 Neome Dr., Flint
Richeson, Mrs. V. N.....702 W. Hamilton, Flint
Rieth, Mrs. George F.....G-6452 Davison Rd., Flint
Rowe, Mrs. John.....1601 Lyon, Flint
Rulney, Mrs. Max.....323 Ferndale Pl., Flint
Rundles, Mrs. W. Z., Jr.....607 Rome Court, Flint
Sandberg, Mrs. Russell.....2030 Pierce, Flint
Sandy, Mrs. Kenneth.....2701 Detroit, Flint
Scavarda, Mrs. Charles.....2101 E. Court, Flint
Schiff, Mrs. Benton.....3040 Parkside Dr., Flint
Schmidlin, Mrs. Robert.....820 E. Atherton Rd., Flint
Schultz, Mrs. J. S.....3327 Fleming Rd., Flint
Schwartz, Mrs. John.....2920 Dupont St., Flint
Shantz, Mrs. Layton.....2026 Calumet, Flint
Sheeran, Mrs. Dan.....610 S. Vernon, Flint
Shipman, Mrs. Charles.....602 Kensington, Flint
Simoni, Mrs. Lewis.....702 Kensington, Flint
Sirna, Mrs. Anthony.....2709 Thomas, Flint

Smith, Mrs. D. C.....811 Thompson, Flint
Smith, Mrs. E. C.....565 Welch, Flint
Smith, Mrs. Harold.....1952 Miller Rd., Flint
Smith, Mrs. M. J.....1521 Cromwell, Flint
Sniderman, Mrs. Ben.....3738 Norwood Dr., Flint
Sorkin, Mrs. Sam.....1919 Miller Rd., Flint
Sparks, Mrs. Harvey.....2749 Thomas, Flint
Steffe, Mrs. Ralph.....1617 Brookwood, Flint
Steinman, Mrs. Floyd.....2418 Nolen Dr., Flint
Stevens, Mrs. Philip K.....468 Commonwealth, Flint
Stevenson, Mrs. Wm.....1901 Ramsey, Flint
Stroup, Mrs. Clayton.....G-5208 E. Court, Flint
Thompson, Mrs. Alvin.....1607 Cromwell, Flint
Thompson, Mrs. Jack.....3031 Westwood Pkwy., Flint
Tuuri, Mrs. Arthus.....1707 Greenway, Flint
Van Harn, Mrs. Ray.....2102 Winona, Flint
Varney, Mrs. Howard.....2564 Thomas St., Flint
Vary, Mrs. Edwin.....2472 Nolen Dr., Flint
Ware, Mrs. Frank.....902 Woodside Dr., Flint
Wark, Mrs. D. R.....1315 Detroit, Flint
Weber, Mrs. Robert.....2602 N. Stevenson St., Flint
Wentworth, Mrs. John.....1651 Chevrolet Ave., Flint
White, Mrs. Herbert.....1620 Mason, Flint
Williams, Mrs. W. S.....5216 S. Genesee Rd., Grand Blanc
Willoughby, Mrs. Gordon.....5013 N. Saginaw, Flint
Willoughby, Mrs. L. L.....1017 Woodlawn Pkwy., Flint
Wills, Mrs. T. W.....608 Welch, Flint
Winchester, Mrs. Walter.....801 E. 9th St., Flint
Woughter, Mrs. Harold.....2123 Radcliff, Flint
Wright, Mrs. Don R.....403 W. Court St., Flint
Wyatt, Mrs. William.....1317 Riverdale Rd., Flint

GOGEBIC-ONTONAGON COUNTIES

Ashe, Mrs. Henry.....210 Suffolk St., Ironwood
Albert, Mrs. Sam G.....221 E. Coolidge Ave., Ironwood
Davidson, Mrs. Donald L.....Ramsey
Eisele, Mrs. David.....120 W. Francis St., Ironwood
Franck, Mrs. J. R.....525 Harrison, Wakefield
Gingrich, Mrs. Wayne.....Lake Rd., Ironwood
Gorilla, Mrs. A. C.....516 N. Lawrence, Ironwood
Harrington, Mrs. Rex.....104 E. Ridge, Ironwood
Hogue, Mrs. Harold.....Ewen
Keskey, Mrs. Theodore.....205 W. Coolidge, Ironwood
McEnroe, Mrs. John E.....7 Newport Heights, Ironwood
O'Brien, Mrs. A. J.....419 E. Vaughn, Ironwood
Pinkerton, Mrs. H. A.....9 Newport Heights, Ironwood
Santini, Mrs. Florian.....615 N. Lowell St., Ironwood
Stevens, Mrs. Charles.....414 N. Lowell St., Ironwood
Tashiro, Mrs. Kiyo.....218 N. Lawrence St., Ironwood
Tressel, Mrs. H. A.....308 Sunday Lake St., Wakefield
Wacek, Mrs. William.....809 Sunset Rd., Ironwood

GRAND TRAVERSE-LEELANAU-BENZIE COUNTIES

Beall, Mrs. J. G.....P.O. Box 283, Traverse City
Benjamin, Mrs. Mac.....Box C, Traverse City
Bolan, Mrs. E. J.....Sutton's Bay
Brownson, Mrs. Jay J.....Kingsley
Brownson, Mrs. K. M.....Peninsula Dr., Traverse City
Bushong, Mrs. B. B.....318 Wellington Ave., Traverse City
Carrow, Mrs. Fleming.....Park Pl. Hotel, Traverse City
Clark, Mrs. Chas. D.....Rt. 10, Box 41, Traverse City
Cline, Mrs. Theodore.....Rt. 5, Box 611, Traverse City
Cline, Mrs. Warren.....1629 S. High St., Traverse City
Dunn, Mrs. Charles.....Box C, Traverse City
Ellis, Mrs. Claude.....Sutton's Bay
Ferguson, Mrs. J.....Box C, Traverse City
Gallagher, Mrs. Wm.....Box C, Traverse City
Haberlein, Mrs. Charles.....701 Monroe, Traverse City
Hall, Mrs. J. W.....Peninsula Dr., Traverse City
Hamilton, Mrs. E. E.....627 Ahgosa Trail, Traverse City
Huene, Mrs. Nevin.....508 State St., Traverse City
Jerome, Mrs. J. T.....609 6th St., Traverse City
Kyselka, Mrs. Harry.....East Long Lake Rd., Traverse City
Lawton, Mrs. F. L.....540 West 7th St., Traverse City
Lemen, Mrs. C. E.....521 Washington Ave., Traverse City
Lossman, Mrs. Robert.....Deepwater Point, Rt. 2, Williamsburg
McClay, Mrs. Adam C.....Rt. 10, Box 18, Traverse City
Merritt, Mrs. H. E.....112½ E. Front St., Traverse City
Miller, Mrs. C. S.....State Hospital, Box C, Traverse City
Milliken, Mrs. John.....1435 Peninsula Dr., Traverse City
Nickels, Mrs. M. M.....Rt. 4, Box 121, Traverse City
Noyes, Mrs. Guy.....445 East 8th St., Traverse City
Osterlin, Mrs. Mark.....Peninsula Drive, Rt. 10, Traverse City
Otto, Mrs. D. L.....Rt. 11, Box 144A, Traverse City
Pike, Mrs. D. G.....E. Bay Shore Dr., Traverse City
Power, Mrs. Frank.....521 Sixth St., Traverse City
Salon, Mrs. D.....216 S. Elmwood Ave., Traverse City
Sladek, Mrs. E. F.....224 Seventh St., Traverse City
Stokes, Mrs. G. E.....425 Sixth St., Traverse City
Sweeney, Mrs. Bernard....Grandview Pkwy., Traverse City
Thirlby, Mrs. E. L.....520 Sixth St., Traverse City
Thirlby, Mrs. Richard....1315 Wayne St., Traverse City
Wagener, Mrs. Creighton.....Rt. 11, Box 144, Traverse City
Weih, Mrs. J. E.....U. S. 31 North, Traverse City
Weitz, Mrs. Harry.....529 Monroe, Traverse City
Wilcox, Mrs. Paul H.....526 W. 10th, Traverse City
Zielke, Mrs. I. H.....515 Elmwood Ave., Traverse City
Zimmerman, Mrs. J. C.....606 N. Elmwood Ave., Traverse City

GRATIOT-ISABELLA-CLARE COUNTIES

Barstow, Mrs. D. K.....215 W. Saginaw, St. Louis
Barstow, Mrs. W. E.....215 W. Saginaw, St. Louis
Bedo, Mrs. A. V.....906 S. Franklin, Mt. Pleasant
Chamberlain, Mrs. R. W.....608 E. Chippewa, Mt. Pleasant
Chamichian, Mrs. Soren.....1026 S. Drive, Mt. Pleasant
Davis, Mrs. L. L.....314 S. Brown, Mt. Pleasant
Graham, Mrs. B. J.....119½ E. Superior, Alma
Hall, Mrs. Robert.....805 Douglas, Mt. Pleasant
Hamilton, Mrs. Earl D.....518 N. Fancher St., Mt. Pleasant
Hammerburg, Mrs. Kuno.....622 McEwen, Clare
Harrigan, Mrs. W. L.....408 E. Broadway, Mt. Pleasant
Hedges, Mrs. F. W.....General Delivery, Edmore
Hersee, Mrs. Wm. E.....306 S. College, Mt. Pleasant
Hobbs, Mrs. D.....St. Louis
Hoogerland, Mrs. C. L.....514 Iowa, Alma
Johnson, Mrs. Phillip R.....206 S. College, Mt. Pleasant
Juhnke, Mrs. L. W.....1050 Maple St., Mt. Pleasant
McArthur, Mrs. Stewart C.....Rosebush
Oldham, Mrs. E. S.....Breckenridge
Palmer, Mrs. Fred W.....Box 32, Mt. Pleasant
Ringer, Mrs. P.....700 S. Fancher, Mt. Pleasant
Rottschafer, Mrs. J. L.....715 W. Center St., Alma
Strange, Mrs. Russell H.....117 S. College, Mt. Pleasant
Von Lackum, Mrs. L. F.....525 N. State, Alma
Wallman, Mrs. C. H.....901 State St., Alma
Wickert, Mrs. L. R.....203 N. Fancher, Mt. Pleasant
Wilcox, Mrs. R.....203 West End St., Alma
Wood, Mrs. John M.....815 E. Maple, Mt. Pleasant

HOUGHTON-BARAGA-KEWEENAW COUNTIES

Aldrich, Mrs. A. B.....325 Harris Ave., Hancock
Aldrich, Mrs. A. D.....U.S. 41, Chassel
Aldrich, Mrs. L. C.....1609 E. Houghton, Houghton
Bourland, Mrs. P. D.....134½ Calumet Ave., Calumet
Burke, Mrs. J. J.....102 Duncan Ave., Hubbell
Hillmer, Mrs. R. E.....1 Algoma, Painesdale
Hosking, Mrs. Frederick.....328 Florida, Laurium
Janis, Mrs. A. F.....200 East St., Hancock
King, Mrs. S.....218 Harris Ave., Hancock
Kolb, Mrs. F. E.....128 Calumet St., Calumet
LaBine, Mrs. Alfred.....1019 College Ave., Houghton
Larson, Mrs. F.....1400 Houghton, Houghton
Lepisto, Mrs. Victor....515 Lake Linden Ave., Laurium
Levin, Mrs. Simon.....1209 College, Houghton
Lund, Mrs. Chester....1205 Calumet Ave., Lake Linden
Manthei, Mrs. W. A.....5426 Calumet, Lake Linden
Murphy, Mrs. P. J.....130 Calumet, Calumet
Repolo, Mrs. K.....338 S. Iroquois, Laurium
Roche, Mrs. A. M.....204 Pewabic, Laurium
Rupprecht, Mrs. C. H.....117 Fifth St., Calumet
Sloan, Mrs. P. S.....214 Clark St., Houghton
Smith, Mrs. Chas.....E. White St., Hancock
Stroube, Mrs. John A.....Baraga County Hospital, L'Anse
Wickliffe, Mrs. C. D.....1033 Mine, Calumet
Wickliffe, Mrs. T. P.....1167 Calumet Ave., Calumet
Winkler, Mrs. H. J.....L'Anse

HURON COUNTY

Bash, Mrs. Theodore.....Kinde
Dixon, Mrs. Ralph Pigeon
Elliott, Mrs. C. S.....Pigeon
Gettel, Mrs. Roy.....634 W. Huron Dr., Bad Axe
Herrington, Mrs. Willet....120 N. Hanselman, Bad Axe
Oakes, Mrs. C. W.....Box 26, Harbor Beach
Ritsema, Mrs. John.....Sebewaing
Scheurer, Mrs. Clare.....Pigeon
Sorensen, Mrs. Maurice.....Elkton
Steinhardt, Mrs. Edward.....Bad Axe
Thompson, Mrs. J. E.....Caseville
Turner, Mrs. Phillip.....Harbor Beach
Wible, Mrs. C.....Sebewaing

INGHAM COUNTY

Agate, Mrs. G. H.....1065 Sunset Lane, East Lansing
Alexander, Mrs. Reuben G.....Laingsburg
Altland, Mrs. J. K.....West Mt. Hope Rd., Rt. 3, Lansing
Badgley, Mrs. W. O.....1523 W. Ionia St., Lansing
Baker, Mrs. Thomas.....1524 Boston Blvd., Lansing
Bauer, Mrs. T. I.....839 Wildwood Dr., East Lansing
Behen, Mrs. W. C.....535 S. Capitol, Lansing
Bingham, Mrs. B. Wayne....1123 N. Hayford, Lansing
Bradford, Mrs. C. W.....832 Westlawn St., East Lansing
Breakey, Mrs. Robert.....520 Westmoreland, Lansing
Brown, Mrs. F. W., Jr.....706 Britten, Lansing
Brubaker, Mrs. Earl.....444 S. Verlinden, Lansing
Brucker, Mrs. K. B.....610 S. Walnut, Lansing
Bruni, Mrs. J. R.....301 W. Barnes, Lansing
Burhans, Mrs. R. A.....973 Rosewood, East Lansing
Cairns, Mrs. D. A.....300 S. Washington Ave., Mason
Calomeni, Mrs. A. D.....1523 W. Michigan Ave., Lansing
Cameron, Mrs. W. J.....920 N. Capitol, Lansing
Carlson, Mrs. Ralph.....1136 Hapeman, Lansing
Carr, Mrs. E. I.....1915 Moores River Dr., Lansing
Casey, Mrs. Bryon.....337 Chesterfield Pkwy., East Lansing
Cheney, Mrs. W. D.....Rt. 2, Okemos
Christian, Mrs. L. G.....400 Everett Dr., Lansing
Clark, Mrs. W. E.....809 Ash St., Mason
Clinton, Mrs. G. R.....618 S. Jefferson, Mason
Combs, Mrs. Robert.....403 Butterfield, East Lansing
Comstock, Mrs. H. C.....512 Division, East Lansing
Cook, Mrs. R. J.....105 S. Jenison, Lansing
Cope, Mrs. H. E.....605 Westmoreland, Lansing
Cordes, Mrs. Jerome F.....2290 Shawnee Trail, Okemos
Cowan, Mrs. John A.....825 Touraine, East Lansing
Cross, Mrs. F. S.....432 Highland, East Lansing
Cummings, Mrs. G. D.....511 Westmoreland, Lansing
Cushman, Mrs. J. F.....408 N. Sycamore, Lansing
Darling, Mrs. L. H.....431 S. Verlinden Ave., Lansing
Dawe, Mrs. C. D.....1541 Ann St., East Lansing
Dean, Mrs. Carleton.....155 Maplewood Dr., East Lansing
DeVries, Mrs. C. F.....Delta River Rd., Lansing
Doyle, Mrs. C. P.....215 N. Logan, Lansing
Drolett, Mrs. Don.....2408 Arlington Rd., Lansing
Drolett, Mrs. F. C.....1623 Inverness, Lansing
Drolett, Mrs L. A.....228 S. Jenison, Lansing
Dunn, Mrs. F. M.....614 Whitehills Dr., East Lansing
Fenney, Mrs. K. J.....822 Durant, Lansing
Finch, Mrs. R. L.....1538 Forbes, Lansing
Folkers, Mrs. Leonard.....991 Rosewood, East Lansing
Fortino, Mrs. S. P.....444 West St., Lansing
Fosget, Mrs. Wilbur.....210 E. Hillsdale, Lansing
Freeland, Mrs. Orrin H.....602 N. Hogsback Rd., Mason
French, Mrs. H. L.....Delta River Rd., Lansing
Gardner, Mrs. C. B.....1815 Moores River Dr., Lansing
Garlinghouse, Mrs. A. J.....922 Green St., Lansing
George, Mrs. H. C.....821 Lantern Hill Dr., East Lansing
Goldner, Mrs. R. E.....744 Verlinden Ave., Lansing
Govons, Mrs. Sidney.....1603 W. Kalamozoo, Lansing
Harris, Mrs. H. W.....1300 Wellington Dr., Lansing
Harrison, Mrs. Wm. H.....1306 Hyland, Lansing
Harrold, Mrs. J. F.....1713 Osborn Rd., Lansing
Hart, Mrs. L. C.....119 W. Lenawee, Lansing
Hayes, Mrs. Robert E.....1020 Britten, Lansing
Hayford, Mrs. W. D.....1006 Wildwood Dr., East Lansing
Haze, Mrs. H. A.....Hotel Olds, Lansing
Heald, Mrs. Gordon....538 Walbridge Dr., East Lansing
Heckert, Mrs. F. B.....Delta River Rd., Lansing
Heckert, Mrs. J. K.....E. Grand River at Hagadorn, East Lansing
Heerdt, Mrs. Mark.....2195 Kent, Okemos
Henderson, Mrs. Norman.....220 W. Madison, Lansing
Heustis, Mrs. A. E.....410 Cowley Ave., East Lansing
Himmelberger, Mrs. R. J.....227 West, Lansing
Hodges, Mrs. Kenneth.....421 West, Lansing
Hofstra, Mrs. Raymond.....1628 Berkeley Dr., Lansing
Hogg, Mrs. Raymond.....4172 Dallas, Holt
Holland, Mrs. Charles F.....166 Orchard, East Lansing
Holm, Mrs. M. L.....913 W. Allegan, Lansing
Huggett, Mrs. C. C.....1531 Osborne, Lansing
Isbister, Mrs. J. L.....104 S. Jenison, Lansing
Jacob, Mrs. S. S.....1044 Wildwood Dr., East Lansing
Johnson, Mrs. David B.....1426 Sherwood, East Lansing
Johnson, Mrs. H. T.....817 N. Foster, Lansing
Johnson, Mrs. K. H.....1539 Spencer, Lansing
Jones, Mrs. F. A., Sr.....1025 Roxburgh Rd., East Lansing
Jones, Mrs. F. A., Jr.....1025 Roxburgh Rd., East Lansing
June, Mrs. R. C.....2902 Timber Dr., Lansing
Kahn, Mrs. David.....1519 Pershing Ave., Lansing
Kalmbach, Mrs. R. E.....1600 Wellington, Lansing
Keim, Mrs. C. D.....1415 W. Kalamazoo St., Lansing
Klunzinger, Mrs. Willard.....810 Roxburgh Rd., East Lansing
Kraft, Mrs. Lester.....209 E. Main St., Leslie
Landy, Mrs. G. R.....1023 North Jenison, Lansing
Lange, Mrs. Phillip F.....1652 Sunnyside, Lansing
LeDuc, Mrs. Don.....405 University Dr., East Lansing
Leshock, Mrs. J. C.....249 Milford, East Lansing
Le Vett, Mrs. H. L.....431 Kedzie Dr., East Lansing
Lewis, Mrs. Clayton.....1107 N. Capitol, Lansing

Long, Mrs. Chas.....1831 Roseland, East Lansing
Loree, Mrs. M. C.....1615 Abbott Rd., East Lansing
Lucas, Mrs. T. A.....2629 Creston, Lansing
Ludlum, Mrs. L. C.....1126 W. Saginaw, Lansing
Martin, Mrs. Wayne.....4765 Nakoma Dr., Okemos
McCorvie, Mrs. C. R.....12A Hillcrest Village East Lansing
McCrumb, Mrs. R. R.....1216 Parkdale, Lansing
McGillicudy, Mrs. Robert.....528 E. Oakwood Dr., East Lansing
McGillicuddy, Mrs. O. B.....407 Walbridge Dr., East Lansing
McIntyre, Mrs. J. E.....600 S. Grand Ave., Lansing
McNamara, Mrs. B. E.....804 W. Ottawa St., Lansing
Meade, Mrs. Robert.....834 Rosewood, East Lansing
Meade, Mrs. William.....535 Ardson Rd., East Lansing
Melick, Mrs. R. C.....1616 W. Michigan, Lansing
Menzies, Mrs. Clifford.....734 Linden St., East Lansing
Mercer, Mrs. W. E.....909 Glenhaven, East Lansing
Miller, Mrs. H. A.....1600 Roseland, Royal Oak
Monfort, Mrs. Robert....900 Audubon Rd., East Lansing
Morrow, Mrs. R. J.....411 W. Ottawa St., Lansing
Musson, Mrs. E. K.....1035 N. Capitol, Lansing
Neering, Mrs. Jas. C.....517 Carey, Lansing
Ochsner, Mrs. P. J.....3129 Cambridge Rd., Lansing
Osborn, Mrs. S.....528 W. Ottawa St., Lansing
Paine, Mrs. William G.....724 Rosewood Ave., East Lansing
Palmer, Mrs. R. E.....535½ S. Capitol, Lansing
Philips, Mrs. David.....333 N. Chestnut, Lansing
Phillips, Mrs. Robert.....1257 Grand River Ave., East Lansing
Pinkham, Mrs. R. A.....535 N. Capitol Ave., Lansing
Plesscher, Mrs. W. H. 153 E. Brookfield, East Lansing
Pomeroy, Mrs. R. W.....504 Division, East Lansing
Poppen, Mrs. C. I.....1057 Roxburgh Rd., East Lansing
Prall, Mrs. H. J.....214 W. Main St., Lansing
Randall, Mrs. O. M.....1805 Moores River Dr., Lansing
Reisig, Mrs. Robert.....2226 Marguerite St., Lansing
Richards, Mrs. Frank..311 Kensington Rd., East Lansing
Robson, Mrs. E. J.....728 Audubon Rd., East Lansing
Rollstin, Mrs. R. A.....4796 Ardmore Rd., Okemos
Rozan, Mrs. J. S.....1142 Blake St., Lansing
Ruhrmkorff, Mrs. Ralph H.....1060 Glenhaven, East Lansing
Rulison, Mrs. J. G.....2100 Colonial Plaza, Lansing
Russell, Mrs. Claude V.....3813 W. Willow, Lansing
Rutledge, Mrs. S.....1035 Northlawn, East Lansing
Sander, Mrs. John.....4275 Dobie Rd., Okemos
Scheidt, Mrs. R. R.....W. Delta River Dr., Lansing
Schultz, Mrs. Arthur.....4646 Ottawa Dr., Okemos
Shapiro, Mrs. Hyman D.....1236 N. Downer, Lansing
Sharp, Mrs. Mahlon.....950 Audubon Rd., East Lansing
Shaw, Mrs. Milton.....415 West St., Lansing
Sherman, Mrs. George.....504 Cowley, East Lansing
Sichler, Mrs. Harper.....443 Clifton Blvd., East Lansing
Silverman, Mrs. I. E.....1602 Clifton, Lansing
Sleight, Mrs. J. L.....3001 Westchester, Lansing
Smith, Mrs. A. V.....116 Sycamore, Mason
Snell, Mrs. Dana M.....312 N. Harrison Rd., East Lansing
Snyder, Mrs. LeMoyne.....Paradise, Calif.
Spagnuolo, Mrs. A. J.....2304 Marion Ave., Lansing
Spencer, Mrs. Chas. T.....1134 Southlawn, East Lansing
Spencer, Mrs. P. C.....602 Northlawn, East Lansing
Stanley, Mrs. A. L.....408 Whitehills Dr., East Lansing
Steiner, Mrs. A. A.....Rt. 3, Grand Ledge
Steiner, Mrs. S. D.....415 Clarendon St., East Lansing
Stiles, Mrs. Frank.....615 Northlawn, East Lansing
Stilwell, Mrs. George D.....518 Sunrise Ct., East Lansing
Stimson, Mrs. Paul R.....1841 Clark, Lansing
Stone, Mrs. B. J.....736 Rosewood, East Lansing
Stow, Mrs. Robt. M.....1063 Rosewood, East Lansing
Strauss, Mrs. P. C.....1514 Osborn Rd., Lansing
Stringer, Mrs. C. J.....1701 W. Kalamazoo St., Lansing
Sundell, Mrs. Edwin C.....338 Marshall, East Lansing
Swartz, Mrs. F. C.....500 Kedzie Dr., East Lansing
Tamblyn, Mrs. F. W.....Waverly Rd., Rt. 3, Lansing
Toothaker, Mrs. K.W.....1609 W. Michigan Ave., Lansing
Towne, Mrs. L. C.....701 Britten, Lansing
Trescott, Mrs. R. F.....218 Chesterfield Pkwy., East Lansing
Trimby, Mrs. Robert....611 Whitehills Dr., East Lansing
Troost, Mrs. F. L.....4395 W. Delhi, Holt
VanderZalm, Mrs. T. P.....1452 Cambridge Rd., Lansing
Venier, Mrs. J. H.....812 Sparrow Ave., Lansing
Wadley, Mrs. Ralph.....930 Roxburgh, East Lansing
Walker, Mrs. L.....1302 Pershing Dr., East Lansing
Webb, Mrs. Roy.....2176 Hamilton Rd., Box 3, Okemos
Weinburg, Mrs. H. B.....520 Butterfield, East Lansing
Wellman, Mrs. John.....1809 W. Hillsdale, Lansing
Wenzler, Mrs. P. J.....912½ Seymour, Lansing
Wilensky, Mrs. Thomas....527 W. Oakwood, East Lansing
Wiley, Mrs. H. W.....402 N. Jenison, Lansing
Wilson, Mrs. H. A.....222 Strathmore, Lansing
Willson, Mrs. Howard.....435 McPherson St., Lansing
Wolcott, Mrs. Lester E.....2377 Seminole Dr., Okemos
Worthington, Mrs. R.....717 Britten St., Lansing

IONIA-MONTCALM COUNTIES

Buck, Mrs. Jack.....118 N. Jefferson St., Ionia
Campbell, Mrs. R. E.....430 E. Main, Ionia
Cook, Mrs. George.....649 Riverside Dr., Ionia
Hoffs, Mrs. M. A.....Eagle Pt., Lake Odessa
Kopchick, Mrs. Joseph.....Muir
Minick, Mrs. W. G.....204 Hanover, Belding
Slagh, Mrs. M. E.....188 Main, Saranac
Smith, Mrs. Robert.....Roselawn Terrace, Ionia
Socha, Mrs. Edmund.....217 East Main St., Ionia
Tannheimer, Mrs. John F.....4 Lovell, Ionia
Tromp, Mrs. Jack.....Jordan Lake St., Lake Odessa

JACKSON COUNTY

Abraham, Mrs. A. O.....Hudson
Adams, Mrs. E. W.....749 Oakridge Dr., Jackson
Ahronheim, Mrs. J. H.....1410 Greenwood Ave., Jackson
Appel, Mrs. Saul.....808 S. Durand, Jackson
Baker, Mrs. G. M.....Parma
Bartholic, Mrs. F. W.....Rt. 1, Rives Junction
Beckwith, Mrs. S. A.....Stockbridge
Brashares, Mrs. Z. A.....Brooklyn
Bullen, Mrs. G. R.....418 Third St., Jackson
Clarke, Mrs. C. S.....1046 Fourth St., Jackson
Cooley, Mrs. Charles W.....315 S. Wisner, Jackson
Cooley, Mrs. R. M.....141 E. Robinson, Jackson
Corley, Mrs. Cecil.....800 Crescent, Jackson
Corley, Mrs. E. H.....1211 W. Franklin, Jackson
Corley, Mrs. R. W.....1104 W. Michigan, Jackson
Cox, Mrs. Ferdinand.....1601 Fourth St., Jackson
Culver, Mrs. G. D.....Stockbridge
DeMay, Mrs. C. E.....410 DeMay Court, Jackson
DeMay, Mrs. J. D.....1204 Third St., Jackson
Deming, Mrs. R. C.....746 Union St., Jackson
Dengler, Mrs. C. R.....504 Third St., Jackson
Dickman, Mrs. H. M.....Hudson
Douglas, Mrs. E. W.....924 Cooper, Jackson
Faust, Mrs. W. L.....Grass Lake
Filip, Mrs. H. K.....755 W. Michigan, Jackson
Finton, Mrs. R. E.....1812 Grovedale, Jackson
Finton, Mrs. Walter L.....1502 Carlton Blvd., Jackson
Growt, Mrs. B. N.....Addison
Hackett, Mrs. T. E.....1124 Burr St., Jackson
Hackett, Mrs. T. L.....3160 Reynolds Rd., Jackson
Hanft, Mrs. C. F.....Springport
Hansen, Mrs. V. R.....Chelsea
Hardie, Mrs. G. C.....218 Fourth, Jackson
Harris, Mrs. L. J.....607 W. Washington, Jackson

Hicks, Mrs. G. C.....1009 Wildwood Ave., Jackson
Holst, Mrs. J. B.....1437 Wickwire Rd., Jackson
Hunt, Mrs. M. R.....2434 Francis St., Jackson
Joerin, Mrs. W. A.....734 Griswold, Jackson
Karr, Mrs. J. P.....844 Woodbine, Jackson
Keefer, Mrs. A. H.....Concord
Kempton, Mrs. George.....748 Crescent Rd., Jackson
Kline, Mrs. Starr.....3525 Jefferson Rd., Clark Lake
Kraft, Mrs. L. C.....Leslie
Kudner, Mrs. D. F.....1300 W. Franklin, Jackson
Lake, Mrs. Ed.....786 Bloomfield Blvd., Jackson
Landron, Mrs. Daniel.....4633 Page Ave., Jackson
Lenz, Mrs. C. R.....1833 Shoemaker Dr., Jackson
Leonard, Mrs. C. A.....1116 S. Bowen, Jackson
Lewis, Mrs. E. F.....609 S. Wisner, Jackson
Linden, Mrs. V. E.....5712 Brown's Lake Rd., Jackson
Ludwick, Mrs. J. E.....6220 Brooklyn Rd., Jackson
Ludwick, Mrs. John P.....833 Westwood Blvd., Jackson
McGarvey, Mrs. W. E.....319 S. Higby, Jackson
McLaughlin, Mrs. John.....1609 W. Franklin, Jackson
McLaughlin, Mrs. M. J.....6300 Brown's Lake Rd., Jackson
McLauthlin, Mrs. H. B.....200 S. Higby St., Jackson
Meads, Mrs. J. B.....1714 Fourth St., Jackson
Medlar, Mrs. B. E.....407 S. Wisner, Jackson
Morelli, Mrs. Lorenzo.....514 S. Brown St., Jackson
Munro, Mrs. C. D.....740 W. Michigan, Jackson
Munro, Mrs. N. D.....417 Edwards, Jackson
Murphy, Mrs. B. M.....729 Oakdale, Jackson
Newton, Mrs. R. E.....3124 Horton Rd., Jackson
Oleksy, Mrs. S. P.....744 W. Michigan, Jackson
Olsen, Mrs. Lloyd L.....1410 W. Washington, Jackson
Otis, Mrs. Grant L.....922 Oakgrove Ave., Jackson
Parker, Mrs. E. E.....Leslie
Payne, Mrs. A. K.....914 S. Brown St., Jackson
Phillips, Mrs. G. H.....326 W. Cortland, Jackson
Porter, Mrs. H. W.....1008 Carlton Blvd., Jackson
Pray, Mrs. F. F.....310 Steward Ave., Jackson
Pray, Mrs. G. R.....404 S. Jackson, Jackson
Rice, Mrs. J. W.....705 Bloomfield Blvd., Jackson
Ries, Mrs. R. G.....824 Brown's Lake Rd., Jackson
Riley, Mrs. Philip.....205 W. Franklin St., Jackson
Sargent, Mrs. L. E.....114 N. Thompson, Jackson
Sautter, Mrs. W. A.....Horton
Schmidt, Mrs. T. E.....1414 W. Washington, Jackson
Scott, Mrs. J. A.....119 S. Bowen, Jackson
Shaeffer, Mrs. A. M.....120 S. Durand, Jackson
Shaeffer, Mrs. Dale.....206 So. Wisner, Jackson
Sher, Mrs. D. B.....956 Cooper, Jackson
Sill, Mrs. H. W.....214 S. Durand, Jackson
Sirhal, Mrs. A. M.....560 N. Shore Dr., Clark Lake
Smith, Mrs. D. W.....1205 W. Washington, Jackson
Southwick, Mrs. W. A.....948 Cooper St., Jackson
Stewart, Mrs. L. L.....308 Edgewood St., Jackson
Stewart, Mrs. Lewis L.....220 Summit, Jackson
Stolberg, Mrs. Carl A.....828 Oakridge Dr., Jackson
Stone, Mrs. E. L.....1011 S. Brown St., Jackson
Taylor, Mrs. R. V.....800 S. Grinnell, Jackson
Thalner, Mrs. L. F.....609 W. Michigan, Jackson
Thayer, Mrs. E. A.....2018 Spring Arbor Rd., Jackson
Thompson, Mrs. Tom.....200 Fourth, Jackson
Torwick, Mrs. E. T.....1107 Union St., Jackson
Townsend, Mrs. J. W.....108 Hague, Vandercook Lake
Van Gasse, Mrs. J. J.....3458 Acacia, Jackson
Van Schoick, Mrs. Frank..1301 Greenwood Ave., Jackson
Van Schoick, Mrs. John.....Hanover
Van Wagner, Mrs. F. I.....1232 First St., Jackson
Vivirski, Mrs. E. E.....603 S. Elm, Jackson
Weddon, Mrs. E. R.....Stockbridge
Wholihan, Mrs. John.....602 W. Michigan, Jackson
Wickham, Mrs. W. A.....1902 Fourth St., Jackson
Wille, Mrs. Warren S.....1346 Kathmir Dr., Jackson

KALAMAZOO COUNTY

Aach, Mrs. Hugo.....3232 Bronson Blvd., Kalamazoo
Alexander, Mrs. C. A.....8312 Gull Rd., Kalamazoo
Andrews, Mrs. Sherman..2326 Springhill Dr., Kalamazoo
Appel, Mrs. Ben.....516 Montrose, Kalamazoo
Appel, Mrs. William....1826 Paddington Rd., Kalamazoo
Banner, Mrs. L. R.....Hickory Corners
Barak, Mrs. Herbert.....2122 Chevy Chase, Kalamazoo
Barry, Mrs. Manley.....819 Worden, Kalamazoo
Bennett, Mrs. Keith.....2338 Tipperary Rd., Kalamazoo
Betz, Mrs. Eldean 1521 Timberlane Dr., Kalamazoo
Birch, Mrs. W.....1539 Grand Ave., Kalamazoo
Borgman, Mrs. Wallace....2252 Chevy Chase, Kalamazoo
Breneman, Mrs. James.....25 Pearl St., Galesburg
Brown, Mrs. I. W.....1628 Cambridge Rd., Kalamazoo
Brue, Mrs. P. P.....1009 Cambridge Dr., Kalamazoo
Burbidge, Mrs. Earl.....359 Park Ave., Parchment
Burrell, Mrs. Robert.....2017 Hillsdale Ave., Kalamazoo
Callander, Mrs. C. G.....4418 Lake Forrest Dr., Kalamazoo
Chrest, Mrs. C. P.....2740 Bronson Blvd., Kalamazoo
Cobb, Mrs. H. R..... 3403 Knox Ave., Kalamazoo
Conrad, Mrs. Maynard.....1509 Timberlane Dr., Kalamazoo
Cooper, Mrs. Paul.....4326 Oakland Dr., Kalamazoo
Crane, Mrs. Bart.....420 S. Rose, Kalamazoo
Crawford, Mrs. Kenneth....1532 Grand Ave., Kalamazoo
Creager, Mrs. F. A.....907 Wheaton, Kalamazoo
Cretsinger, Mrs. Francis.....2012 Chevy Chase Blvd., Kalamazoo
Currier, Mrs. R. K.....1223 Kilgore Rd., Kalamazoo
Dana, Mrs. Robert.....2240 Sheffield Dr., Kalamazoo
Decker, Mrs. William.....1145 Oakland Dr., Kalamazoo
Delbert, Mrs. Stewart G.....410 Edgemoor, Kalamazoo
DeLong, Mrs. Robt.....110 W. Crescent Dr., Kalamazoo
DenBlyker, Mrs. Walter.....513 S. Burdick, Kalamazoo
DePree, Mrs. H. E.....708 Whites Rd., Kalamazoo
Dew, Mrs. Robert.....2253 Sheffield Dr., Kalamazoo
DeWitt, Mrs. Norman....161 S. Prospect St., Kalamazoo
Dick, Mrs. Leo.....428 Stuart, Kalamazoo
Doezema, Mrs. Edward.....802 Grand Pre, Kalamazoo
Dowd, Mrs. Bernard....1415 Henderson Dr., Kalamazoo
Doyle, Mrs. Fred..... 3240 Bronson Blvd., Kalamazoo
Endrei, Mrs. Arisztid..Box A, State Hospital, Kalamazoo
Estill, Mrs. Don.....1605 N. Church, Kalamazoo
Fast, Mrs. Ralph.....1425 Low Rd., Kalamazoo
Fath, Mrs. August.....5029 Angling Rd., Kalamazoo
Finton, Mrs. Max.....1418 Kilgore Rd., Kalamazoo
Fopeano, Mrs. John.....2121 Sheffield Dr., Kalamazoo
French, Mrs. Merle.....1128 Miles, Kalamazoo
Fuller, Mrs. Paul.....115 Carmel, Kalamazoo
Gerstner, Mrs. Louis.....2425 Law, Kalamazoo
Gladstone, Mrs. William.....4322 Sunnybrook Dr., Kalamazoo
Glaser, Mrs. Dan.....141 S. Prairie, Kalamazoo
Green, Mrs. William.....2622 Alta Vista, Kalamazoo
Grekin, Mrs. Robert.....1522 Southern, Kalamazoo
Haddock, Mrs. D. A...4426 Lake Forest Dr., Kalamazoo
Hammer, Mrs. John.....121 Monroe, Kalamazoo
Hanson, Mrs. Curtis.....1207 Maple, Kalamazoo
Harrell, Mrs. Frank.....120 N. Arlington, Kalamazoo
Harrelson, Mrs. W. D.....3625 Old Colony Rd., Kalamazoo
Hayner, Mrs. Russell.....718 Royce, Kalamazoo
Heersma, Mrs. H. S.....1924 Winchell, Kalamazoo
Heinle, Mrs. Robert.....2517 Bronson Blvd., Kalamazoo
Herbert, Mrs. Walter.....2777 Highland Park, Richland
Hersey, Dr. Margaret....4407 Bronson Blvd., Kalamazoo
Hildreth, Mrs. Roscoe.....226 Grandview, Kalamazoo
Hoebeke, Mrs. W. G.....1408 Long Rd., Kalamazoo
Holder, Mrs. C. O.....1207 Oakland Dr., Kalamazoo
Howard, Mrs. Grant.....2025 Chevy Chase Blvd., Kalamazoo
Hubbell, Mrs. R. J.....3538 Bronson Blvd., Kalamazoo
Irwin, Mrs. Wm.....2333 Sheffield Dr., Kalamazoo
Jackson, Mrs. H.....1224 Hillcrest, Kalamazoo
Jennings, Mrs. Robert.....814 Oakland Dr., Kalamazoo
Jennings, Mrs. W. O.....1136 Long Rd., Kalamazoo

Kilgore, Mrs. Robert..5140 Morningside Dr., Kalamazoo
Klerk, Mrs. Wm.....2421 Waite, Kalamazoo
Koestner, Mrs. P.....742 Norton Dr., Kalamazoo
Lavender, Mrs. Howard.....605 Norton Dr., Kalamazoo
Lawrence, Mrs. James....1409 Henderson Dr., Kalamazoo
Lemmer, Mrs. Richard....2933 Bronson Blvd., Kalamazoo
Littig, Mrs. John.....1708 Embury Rd., Kalamazoo
Locklin, Mrs. W.....4444 Lake Forest Dr., Kalamazoo
Loynd, Mrs. James.....4041 Hillandale, Kalamazoo
MacDonald, Mrs. Marshall.....2824 Hill'N'Brook, Kalamazoo
MacGregor, Mrs. John.....226 Church, Parchment
Machin, Mrs. Harold....2348 Tipperary Rd., Kalamazoo
Malone, Mrs. James.....3809 Bronson Blvd., Kalamazoo
Margolis, Mrs. Fred.....2134 Waite Ave., Kalamazoo
Marshall, Mrs. Don.....2344 Sheffield Dr., Kalamazoo
Marshall, Mrs. William.....150 Edgemoor, Kalamazoo
Martens, Mrs. Irvin.....517 Sturgis Rd., Parchment
May, Mrs. Donald.....1327 Maple, Kalamazoo
McCarthy, Mrs. J. S.....1005 Oakland Dr., Kalamazoo
McManus, Mrs. James.....2134 Waite Ave., Kalamazoo
Moe, Mrs. Rex.....4011 Hillandale Dr., Kalamazoo
Morter, Mrs. R. A.....2421 Sheffield, Kalamazoo
Neerkin, Mrs. A. John.....1326 Hillandale, Kalamazoo
Nibbelink, Mrs. Benjamin....6838 N. 25th St., Kalamazoo
Nicholson, Mrs. Robt.....1925 Cambridge Dr., Kalamazoo
O'Donovan, Mrs. B. J.....1562 Spruce, Kalamazoo
Overbey, Mrs. Chas. Jr.....Kalamazoo State Hospital, Kalamazoo
Patmos, Mrs. Martin.....1207 Cherry, Kalamazoo
Peake, Mrs. Charles.....4316 Bronson Blvd., Kalamazoo
Pearson, Mrs. Edwin.....1026 Dwillard Dr., Kalamazoo
Peelen, Mrs. Matthew.....156 Monroe, Kalamazoo
Peelen, Mrs. Wm.....943 W. Inkster, Kalamazoo
Perry, Mrs. C. W.....2030 Waite, Kalamazoo
Pinkham, Mrs. Raymond.....2436 University, Kalamazoo
Pullon, Mrs. Alton.....3114 Bronson Blvd., Kalamazoo
Raisch, Mrs. Frederick..1356 Pinehurst Blvd., Kalamazoo
Rasmussen, Mrs. Leo.....205 N. Michigan, Vicksburg
Rigterink, Mrs. Gerald.....2424 S. Park, Kalamazoo
Roberts, Mrs. M. S.....118 Bulkley, Kalamazoo
Rockwell, Mrs. D.....1227 Jefferson, Kalamazoo
Rogers, Mrs. R. J.....108 Mill St., Vicksburg
Ryan, Mrs. F. P.....2511 Glenwood Dr., Kalamazoo
Scholten, Mrs. Roger.....930 W. Inkster, Kalamazoo
Schrier, Mrs. C. M.....1223 Oakland Dr., Kalamazoo
Scott, Mrs. Wm.....2315 Angling Rd., Kalamazoo
Shook, Mrs. Ralph.....2211 Benjamin, Kalamazoo
Siemsen, Mrs. W. J.....3424 Old Colony Rd., Kalamazoo
Sisk, Mrs. W. M.....2421 Outlook, Kalamazoo
Slatmeyer, Mrs. Karel.....118 S. Prairie, Kalamazoo
Smith, Mrs. T. C.....1215 Oakland Dr., Kalamazoo
Sofen, Mrs. M. B.....903 Edgemoor, Kalamazoo
Southworth, Mrs. Maynard.....Schoolcraft
Stewart, Mrs. William.....2915 Duke St., Kalamazoo
Stiller, Mrs. Anthony.....1235 N. Hillandale Dr., Kalamazoo
Stryker, Mrs. Homer.....448 W. Inkster, Kalamazoo
Upjohn, Mrs. E. Gifford.....2230 Glenwood Ave., Kalamazoo
Vander Velde, Mrs. Kenneth....1910 Waite, Kalamazoo
Verhage, Mrs. M. D.....1748 Greenlawn Ave., Kalamazoo
Volderauer, Mrs. John....905 Edgemoor Ave., Kalamazoo
Warnke, Mrs. R. D.....3012 Kemilworth, Kalamazoo
Weadon, Mrs. P.....2255 Tipperary, Kalamazoo
Williamson, Mrs. Edwin.....6343 Douglas, Kalamazoo
Wu, Mrs. J. F.....3719 Duke St., Kalamazoo
Youngs, Mrs. C. A.....416 S. Burdick, Kalamazoo

KENT COUNTY

Aitken, Mrs. Geo. T.....936 Santa Lucia Dr., S.E., Grand Rapids
Albers, Mrs. G. Donald.....1838 Argentina Dr., S.E., Grand Rapids
Aldridge, Mrs. Charles.....1574 Mackinaw Rd., S.E., Grand Rapids
Andre, Mrs. Harvey M.....1121 Giddings Ave., S.E., Grand Rapids
Baert, Mrs. Geo. H.....631 Prospect Ave., S.E., Grand Rapids
Ballard, Mrs. M. S.....9 College, N.E., Grand Rapids
Balyeat, Mrs. Gordon W.....150 Morningside Dr., S.E., Grand Rapids
Barofsky, Mrs. Gerald F.....653 Griswold, S.E., Grand Rapids
Batts, Mrs. Martin.....246 Aurora, S.E., Grand Rapids
Beaton, Mrs. James H.....1556 Pontiac Rd., S.E., Grand Rapids
Beeman, Mrs. Carl B.....3040 Bonnell S.E., Grand Rapids
Beets, Mrs. W. C.....2221 Jefferson Dr., S.E., Grand Rapids
Bell, Mrs. C. M.....3121 Oakhollow Dr., S.E., Grand Rapids
Benjamin, Mrs. Howard.....957 Maxwell S.E., Grand Rapids
Bennett, Mrs. W. Bruce.....1015 Rosalie, N.W., Grand Rapids
Benson, Mrs. R. R.....1138 Chippewa Dr., S.E., Grand Rapids
Bergsma, Mrs. Stuart.....1942 Sherman, S.E., Grand Rapids
Bignall, Mrs. C. Rex....1134 Conlon, S.E., Grand Rapids
Blackburn, Mrs. H. M.....2401 Breton Rd., S.E., Grand Rapids
Blocksma, Mrs. Ralph..739 Prospect, S.E., Grand Rapids
Boelkins, Mrs. Richard C.....834 Giddings, S.E., Grand Rapids
Boerman, Mrs. Walter....340 Cherry S.E., Grand Rapids
Boersma, Mrs. Donald.....920 Chippewa Dr., S.E., Grand Rapids
Boet, Mrs. John T.....551 Fountain, N.E., Grand Rapids Grand Rapids
Bonzelaar, Mrs. Marvin.....1612 Woodward S.E., Grand Rapids
Booher, Mrs. Craig..2609 Albert Dr., S.E., Grand Rapids
Bosch, Mrs. Leon C.....943 Santa Barbara Dr., S.E., Grand Rapids
Boyce, Mrs. David C.....2310 Estelle Dr., S.E., Grand Rapids
Brace, Mrs. Fred C.....2311 Academy Dr., N.E., Grand Rapids
Braunschneider, Mrs. G. E.....2231 Clover Dr., N.W., Grand Rapids
Brink, Mrs. J. Russell.....1901 Argentina Dr., S.E., Grand Rapids
Brook, Mrs. J. D.....65 S. Wilson Ave., Grandville
Buist, Mrs. Samuel J.....1115 Santa Barbara, S.E., Grand Rapids
Bull, Mrs. Frank.....65 S. State St., Sparta
Burroughs, Mrs. Frank, Jr.....159 Ottawa, Grandville
Butler, Mrs. Wm. J.....111 Alhambra Place, West Palm Beach, Fla.
Carpenter, Mrs. Luther C.....1818 Argentina Dr., S.E., Grand Rapids
Caukin, Mrs. Howard S.....2451 Richard Dr., S.E., Grand Rapids
Cayce, Mrs. William..640 Kent Hills Rd., Grand Rapids
Chandler, Mrs. Donald.....3347 E. Belt Line, N.E., Grand Rapids
Chase, Mrs. R. J.....849 Maxwell, S E., Grand Rapids
Clahassey, Mrs. Erwin G.....427 Mulford Dr., S.E., Grand Rapids
Colvin, Mrs. Walter G.....48 Bel Air Dr., N. E., Grand Rapids
Corbus, Mrs. Burton R.....325 Union, S.E., Grand Rapids
Crane, Mrs. Harold....2221 Madison, S.E., Grand Rapids
Cuncannon, Mrs. Edward M.....1745 Eastern, S.E., Grand Rapids
Currier, Mrs. Fred P.....955 Floral Dr., S.E., Grand Rapids

Damstra, Mrs. Harold J.....1022 Santa Cruz Dr., S.E., Grand Rapids
Davis, Mrs. David B.....1050 San Lucia Dr., S.E., Grand Rapids
Davis, Mrs. R. A.....1420 Berkshire Dr., S.E., Grand Rapids
Dawson, Mrs. W. Douglas.....1021 Iroquois Dr., S.E., Grand Rapids
DeBoer, Mrs. C. J.....191 Elmwood, Grandville
DeBoer, Mrs. Guy W.....41 Maryland, N.E., Grand Rapids
DeMaagd, Mrs. Gerald.....185 S. Monroe, Rockford
DeMol, Mrs. Richard J.....2425 College, S.E., Grand Rapids
Denham, Mrs. Robert H.....535 Plymouth Dr., S.E., Grand Rapids
DePree, Mrs. Joe.....849 Pinecrest, S.E., Grand Rapids
DeVel, Mrs. Leon.....739 Plymouth Dr., S.E., Grand Rapids
DeVries, Mrs. Daniel....82 Maryland, S.E., Grand Rapids
Dewey, Mrs. K. A.....3205 Bonnell Dr., S.E., Grand Rapids
DeYoung, Mrs. Thies.....35 E. Division, Sparta
Diskey, Mrs. Donald G...1911 Lake Michigan Dr., N.W., Grand Rapids
Dixon, Mrs. W. L.....7088 Weller Dr., Rockford
Dixon, Mrs. Willis L.....2335 Boston St., S.E., Grand Rapids
Doctor, Mrs. Luebert.....3496 Lake Dr., S.E., Grand Rapids
Doyle, Mrs. John L.....2436 Paris, S.E., Grand Rapids
Droste, Mrs. James C.....1545 Seminole Rd., S.E., Grand Rapids
Dyer, Mrs. David.....550 Morris, S.E., Grand Rapids
Eaton, Mrs. Robert M.....243 Aurora, S.E., Grand Rapids
Eckmann, Mrs. Bertram.....923 Ogden, S.E., Grand Rapids
Eggleston, Mrs. H. R.....117 Page, N.E., Grand Rapids
Failing, Mrs. John F.....2617 Lake Michigan Dr., N.W., Grand Rapids
Farber, Mrs Charles E.....2930 Bonnell, S.E., Grand Rapids
Faust, Mrs. Lawrence W.....405 Manhattan Rd., S.E., Grand Rapids
Feldhaus, Mrs. Henry.....2419 Berwyck Rd., S.E., Grand Rapids
Fellows, Mrs. Kenneth F.....3341 Ashton Rd., S.E., Grand Rapids
Ferguson, Mrs. James.....2230 Hall, S.E., Grand Rapids
Ferguson, Mrs. Lynn A.....635 Cambridge, S.E., Grand Rapids
Ferguson, Mrs. Ward S.....2117 Hall, S.E., Grand Rapids
Ferrand, Mrs. Louis G.....119 N. Monroe, Rockford
Fitts, Mrs. Ralph L.....1930 Michigan Rd., N.E., Grand Rapids
Fitzgerald, Mrs. Erwin L.....2005 Hall, S.E., Grand Rapids
Flintoff, Mrs. William.....720 Ethel Ave., S.E., Grand Rapids
Flynn, Mrs. J. Donald.....836 Floral Dr., S.E., Grand Rapids
Foshee, Mrs. J. C.....315 Madison, S.E., Grand Rapids
Frantz, Mrs. Charles H. Jr.....1860 Lake Dr., S.E., Grand Rapids
Fuller, Mrs. E. H.....260 Paris, S.E., Grand Rapids
Fuller, Mrs. William J.....2633 Frederick Drive, S.E., Grand Rapids
Gamm, Mrs. Kenneth E.....456 Morris, S.E., Grand Rapids
Gibbs, Mrs. Floyd.....155 Maryland, S.E., Grand Rapids
Gilbert, Mrs. R. H.....1125 San Jose, S.E., Grand Rapids
Gillett, Mrs. F. S.....1928 Sherman, S.E., Grand Rapids
Grant, Mrs Lee O.....1464 Burke, N.E., Grand Rapids
Grass, Mrs. E. J.....858 Pinecrest, S.E., Grand Rapids
Gray, Mrs. Fred B.....2333 Oakwood, S.E., Grand Rapids
Griffith, Mrs. Lucian S.....1934 Sherman, S.E., Grand Rapids
Gunn, Mrs. James A.....1065 San Lucia, S.E., Grand Rapids
Gunning, Mrs. R. E. Lee.....1960 Michigan, N.E., Grand Rapids
Haeck, Mrs. William.....1225 Franklin, S.E., Grand Rapids
Hagerman, Mrs. David B.....1551 Seminole, S.E., Grand Rapids
Hamp, Mrs. A.....1059 Eastwood, S.E., Grand Rapids
Heetderks, Mrs. Dewey R.....6240 Edgehall Dr., S.E., Grand Rapids
Hodgen, Mrs. John T.....2320 Fulton Rd., E., Grand Rapids
Hoekstra, Mrs. A. L.....1812 Kreiser, S.E., Grand Rapids
Holcomb, Mrs. J. Winslow.....1441 Breton Rd., S.E., Grand Rapids
Hollander, Mrs. Stephen.....2027 Godwin, S.E., Grand Rapids
Hoogerhyde, Mrs. Jack.....3355 Ashton Rd., S.E. Grand Rapids
Houghton, Mrs. R. C.....525 Glenwood, S.E., Grand Rapids
Hudson, Mrs. H.....1540 Woodlawn, S.E., Grand Rapids
Hufford, Mrs. Alvin R.....2660 Oakwood, S.E., Grand Rapids
Humphrey, Mrs. James.....1134 Cambridge, S.E., Grand Rapids
Hydrick, Mrs. Robert.....2013 Hamstead, N.W., Grand Rapids
Hyland, Mrs. William A.....2833 Bonnell, S.E., Grand Rapids
Ireland, Mrs. H. D.....700 Fuller, S.E., Grand Rapids
Irwin, Mrs. Thomas C.....325 Morris, S.E., Grand Rapids
Jack, Mrs. William....507 Plymouth, S.E., Grand Rapids
Jameson, Mrs. Fred.....2706 Oakwood Dr., S.E., Grand Rapids
Jaracz, Mrs. Walter J., Sr.....36 Valley, S.E., Grand Rapids
Jaracz, Mrs. W. J., Jr.....430 Morris, S.E., Grand Rapids
Jarvis, Mrs. Chas.....218 Sligh Blvd., N.E., Grand Rapids
Jellema, Mrs. John F.....942 Houseman, N.E., Grand Rapids
Jensen, Mrs. William B.....2925 Oakwood, S.E., Grand Rapids
Johns, Mrs. Donald....655 Broadview, S.E., Grand Rapids
Johnston, Mrs. W. L.....1047 Gladstone, S.E., Grand Rapids
Jones, Mrs. Horace.....3004 Oakwood Dr., S.E., Grand Rapids
Kessler, Mrs. Dale L.....1610 Robinson Rd., S.E., Grand Rapids
Klaus, Mrs. C. D.....214 Bristol, N.W., Grand Rapids
Kniskern, Mrs. Paul W.....1555 Edgewood, S.E., Grand Rapids
Kooistra, Mrs. Henry P.....1564 Pontiac Road, S.E., Grand Rapids
Kool, Mrs. B. P.....419 Comstock, N.E., Grand Rapids
Kreulen, Mrs. Henry..2452 Godwin, S.E., Grand Rapids
Kruse, Mrs. William....2225 Wilshire, S.E., Grand Rapids
Lamberts, Mrs. Austin.....1520 Leffingwell, N.E., Grand Rapids
Lanning, Mrs. Nicholas.....1050 Gladstone, S.E. Grand Rapids
Lentini, Mrs. Joseph R.....2059 Anderson Dr., S.E., Grand Rapids
Lester, Mrs. Vern....1029 San Juan, S.E., Grand Rapids
Lewis, Mrs. G.....30 Manchester Rd., S.W., Grand Rapids
Lieffers, Mrs. Harry.....331 Aurora, S.E., Grand Rapids
Lillie, Mrs. Walter....1038 Pinecrest, S.E., Grand Rapids
List, Mrs. Carl F.....401 Lakeside Dr., S.E., Grand Rapids
MacDonnell, Mrs. James.....185 Maryland, N.E., Grand Rapids
MacIntyre, Mrs. Dugald.....562 Plymouth, S.E., Grand Rapids
Mann, Mrs. Joseph D.....2435 Beechwood Dr., S.E., Grand Rapids
Marsh, Mrs. John P.....1231 Sigsbee, S.E., Grand Rapids

McCormick, Mrs. John K.....401 Cheshire Dr., N.E., Grand Rapids
McDougal, Mrs. William J.....639 Kent Hills, N.E., Grand Rapids
McKenna, Mrs. Joseph L.....1525 Edgewood Dr., S.E., Grand Rapids
Meade, Mrs. Richard H., Jr.....759 San Jose, S.E., Grand Rapids
Meeuwsen, Mrs. Bernard.....664 Winchell, S.E., Grand Rapids
Mehney, Mrs. G. H.....3530 Cascade Rd., S.E., Grand Rapids
Miller, Mrs. J. Duane.....2565 Frederick Dr., S.E., Grand Rapids
Miller, Mrs. J. J.....1580 Water, Marne
Moberg, Mrs. Carl.....2230 Nelson Ave., S.E., Grand Rapids
Moleski, Mrs. Joseph V.....1911 Hall, S.E., Grand Rapids
Moleski, Mrs. Leo T.....1462 Milton, S.E., Grand Rapids
Moleski, Mrs. Stanley.....1701 Pontiac Rd., S.E., Grand Rapids
Moll, Mrs. A. M.....3383 Fulton Rd., E., Grand Rapids
Moore, Mrs. Douglas.....1862 Sherman, S.E., Grand Rapids
Morley, Mrs. John....1505 Mackinaw, S.E., Grand Rapids
Mouw, Mrs. Dirk.....2352 Jefferson Dr., S.E., Grand Rapids
Mulder, Mrs. G. Arthur.....2047 Jefferson Dr., S.E., Grand Rapids
Mulder, Mrs. Jacob D.....6850 Division, S., Grand Rapids
Murphy, Mrs. Miles.....1628 Pontiac Rd., S.E., Grand Rapids

Nanzig, Mrs. Reinard.....821 Chippewa Dr., S.E., Grand Rapids
Northouse, Mrs. Peter B.....1524 Pontiac Rd., S.E., Grand Rapids
Notier, Mrs. Victor A.....2601 Maplewood Dr., S.E., Grand Rapids

Oates, Mrs. S. M.....518 Morris S.E., Grand Rapids
Oliver, Mrs. W. W.....7241 Belding Rd., N.E., Rockford
Overbeek, Mrs. Ernest..458 Mae-thy, S.E., Grand Rapids

Paalman, Mrs. Russell.....497 Marywood Dr., N.E.,
Patterson, Mrs. P. W...2032 Godwin, S.E., Grand Rapids
Payne, Mrs. C. Allen....1289 Perkins, N.E., Grand Rapids
Pearson, Mrs. Glenn.....519 Greenwood, S.E., Grand Rapids
Pedden, Mrs. John.....230 El Centro Blvd., S.E., Grand Rapids
Pilling, Mrs. Warren C.....936 Orchard, S.E., Grand Rapids
Plekker, Mrs. J. D.....1115 Cadillac Dr., S.E., Grand Rapids
Porter, Mrs. Howard.....949 Floral Dr., S.E.,
Posthuma, Mrs. Albert.....2247 College, S.E., Grand Rapids
Pott, Mrs. Abraham L.....612 Kent Hills Rd., N.E., Grand Rapids
Prothro, Mrs. Winston.....465 Cheshire Dr., N.E., Grand Rapids
Pyle, Mrs. Henry J.....1016 Waltham, S.E., Grand Rapids
Ralph, Mrs. L. Paul.....953 Rosewood, S.E., Grand Rapids
Rasmussen, Mrs. R. A.....737 Cambridge, S.E.,
Reed, Mrs. Torrance.....565 Morris, S.E., Grand Rapids
Riekse, Mrs. James M.....437 Hoyt, S.E., Grand Rapids
Rigterink, Mrs. John W.....1291 Cambridge, S.E., Grand Rapids
Riley, Mrs. George L.....1651 Stoddard, N.E., Grand Rapids
Ringenberg, Mrs. J. C.....1736 Cambridge Blvd., S.E., Grand Rapids
Robb, Mrs. Charles....977 Gladstone, S.E., Grand Rapids
Robbert, Mrs. John C.....3947 Omaha, S.E., Grandville
Rodgers, Mrs. William L.....2865 Lakedrive, S.E., Grand Rapids
Rooks, Mrs. Wendell....1158 Nixon, N.W., Grand Rapids
Roosenberg, Mrs. William.....2903 Coit, N.E., Grand Rapids
Rosenzwieg, Mrs. Leonard.....315 Benjamin, S.E., Grand Rapids
Roth, Mrs. Emil M.....319 Morris, S.E., Grand Rapids
Ryan, Mrs. John.....1707 Wealthy, S.E., Grand Rapids

Sanders, Mrs. Jack F.....1184 Griswold, S.E., Grand Rapids
Schaubel, Mrs. Howard J.....728 Cambridge Blvd., S.E., Grand Rapids
Schermerhorn, Mrs. L. J.....40 College, N.E., Grand Rapids
Schneider, Mrs. Geo. R.....934 Rosewood, S.E., Grand Rapids
Schumacher, Mrs. E. E.....2456 Beechwood, S.E., Grand Rapids
Scott, Mrs. William B.....451 Thomas, S.E., Grand Rapids
Seime, Mrs. Reuben.....379 Shottery Dr., S.E., Grand Rapids
Sevensma, Mrs. E. S.....2114 Anderson Dr., S.E., Grand Rapids
Sevensma, Mrs. Eugene S.....2255 Riverside Dr., N.E., Grand Rapids
Sevey, Mrs. L. E.....1145 Benjamin, S.E., Grand Rapids
Shellman, Mrs. M. W.....3152 Brentwood Dr., S.E., Grand Rapids
Sidell, Mrs. Richard H.....927 Princeton, S.E., Grand Rapids
Siebers, Mrs. B. H.....988 Maryland, N.E., Grand Rapids
Slemons, Mrs. C. C.....1324 Logan, S.E., Grand Rapids
Sluyter, Mrs. J. S.....839 Iroquois, S.E., Grand Rapids
Smith, Mrs. A. B.....1434 Byron, S.E., Grand Rapids
Smith, Mrs. R. B.....1529 Burton, S.E., Grand Rapids
Smith, Mrs. R. E.....129 Lafayette, S.E., Grand Rapids
Snapp, Mrs. C. F.....1058 Orchard, S.E., Grand Rapids
Snyder, Mrs. C. H.....3250 O'Brien Rd., S.W., Grand Rapids
Southwick, Mrs. G. H.....1935 SanLuRae, S.E., Grand Rapids
Steffensen, Mrs. W. H.....443 Plymouth, S.E., Grand Rapids
Stonehouse, Mrs. G. G.....208 Pioneer Rd., S.E., Grand Rapids
Stoneman, Mrs. Fernley.....40 E. Prairie, Grandville
Stover, Mrs. V. E.....860 Gladstone, S.E., Grand Rapids
Sugiyama, Mrs. T.....1006 Hollywood, N.E., Grand Rapids
Summers, Mrs. J. E.....1401 Bemis, S.E., Grand Rapids
Swanson, Mrs. A. B.....1722 Breton, S.E., Grand Rapids
Swenson, Mrs. H. C.....1734 Adams, S.E., Grand Rapids

Ten Have, Mrs. John.....3515 Briggs, Blvd., N.E., Grand Rapids
Tesseine, Mrs. A. J.....425 Cambridge Blvd., S.E., Grand Rapids
Teusink, Mrs. Harry....39 W. Beech St., Cedar Springs
Thompson, Mrs. Edward C.....1401 Breton Rd., S.E., Grand Rapids
Thompson, Mrs. F. D.....333 Gladstone, S.E., Grand Rapids
Thomson, Mrs. John W.....2029 Hall, S.E., Grand Rapids
Tidey, Mrs. M. B.....261 College, S.E., Grand Rapids
Tiffany, Mrs. Joseph C.....2322 Jefferson, S.E., Grand Rapids
Torgerson, Mrs. William R.....536 Belvedere Dr., S.E., Grand Rapids
Truog, Mrs. Clarence P.....1470 Briarcliff Drive, S.E., Rt. 3, Grand Rapids

Uthoff, Mrs. Carl.....2253 Foster, N.E., Grand Rapids

Van Bree, Mrs. Raymond.....1521 Ridgewood, S.E., Grand Rapids
Vanden Berg, Mrs. Allison..1120 Cambridge Blvd., S.E., Grand Rapids
Vander Moln, Mrs. John.....1469 Burke, N.E., Grand Rapids
VanderPloog, Mrs. William.....1343 Fuller, S.E., Grand Rapids
VanderVeer, Mrs. Corwin G.....1511 Sylvan, S.E., Grand Rapids

Van Duine, Mrs. H. J.....414 Brookside Dr., S.E., Grand Rapids
Van Noord, Mrs. G. A.....6850 Division, S., Grand Rapids
Van Portflict, Mrs. Paul.....555 Mulford, S.E., Grand Rapids
VanSolkema, Mrs. Andrew.....2155 Romence, N.E., Grand Rapids
VanWoerkom, Mrs. Daniel....1946 Lake Michigan Dr., N.W., Grand Rapids
Van Zwalenburg, Mrs. B. R.....2054 Anderson Dr., S.E., Grand Rapids
Veldman, Mrs. H. E.....2447 Oakwood, N.E., Grand Rapids
Venema, Mrs. Jay R.....540 Overbrook, S.E. Grand Rapids
Vining, Mrs. Keats K., Jr.....934 Princeton, S.E., Grand Rapids
Waterman, Mrs. D. F.....4221 Waltham Dr., S.E., Grand Rapids
Weller, Mrs. Keith E.....1125 Orchard Ave., N.E., Grand Rapids
Wells, Mrs. Merrill..3345 Coit Rd., N.E., Grand Rapids
Wenger, Mrs. A. Verne.....132 Grand, N.E., Grand Rapids
Wenger, Mrs. John....112 Eastmanville St., Coopersville
Westerhof, Mrs. R.....1038 Lake Grove, S.E., Grand Rapids
Whittenberger, Mrs. Robert.....1164 Griswold, S.E., Grand Rapids
Wiese, Mrs. J.....3188 Bonnell, S.E., Grand Rapids
Wilkes, Mrs. John B.....311 Aurora, S.E., Grand Rapids
Williams, Mrs. John R.....2059 College, S.E., Grand Rapids
Willits, Mrs. P. W.....337 Manhattan, S.E., Grand Rapids
Winter, Mrs. G. E.....2316 Jefferson Dr., S.E., Grand Rapids
Wurz, Mrs. J. F.....201 Norwood, S.E., Grand Rapids
Yared, Mrs. J. A.....1901 Lake Dr., S.E., Grand Rapids
Yegge, Mrs. John.....Kent City

LAPEER COUNTY

Ausum, Mrs. J. D.....545 Bancroft, Imlay City
Buchanan, Mrs. Thomas.....Imlay City
Burley, Mrs. David.....Almont
Chapin, Mrs. Clarence.....Columbiaville
Conaway, Mrs. Charles.....746 N. Monroe St., Lapeer
DesJardins, Miss Elaine.....307 Washington St., Lapeer
Dorland, Mrs. Clarke.....211 Lincoln St., Lapeer
Doty, Mrs. James R.....1335 N. Monroe, Lapeer
Greaver, Mrs. Cornell.....North Branch
Heitsch, Mrs. Wm.....892 S. Saginaw, Lapeer
Hunter, Miss Mary Ellen.....1091 Pine St., Lapeer
Hunter, Miss Frances.....1091 Pine St., Lapeer
Kiehle, Mrs. Anna.....706 N. Main St., Lapeer
McBride, Mrs. John R.....Lapeer
Merz, Mrs. Henry G.....1242 Clark Rd., Lapeer
Smith, Mrs. Glenn.....Imlay City
Thomas, Mrs. Orville.....North Branch
Thompson, Mrs. May.....243 Clay St., Lapeer
Zemmer, Mrs. Harry.....Hannamon Rd., Columbiaville
Zolliker, Mrs. Carl.....State Home, Lapeer

LENAWEE COUNTY

Allen, Mrs. R. A.....Rt. 4, Adrian
Benz, Mrs. Carl A.....Rt. 4, Adrian
Blanchard, Mrs. L. E.....224 Seward, Hudson
Blanden, Mrs. Merwin R.....5140 East Monroe Rd. Tecumseh
Claxton, Mrs. W. T.....136 Chicago St., Britton
Cook, Mrs. C. L.....740 North Union St., Tecumseh
Dustin, Mrs. R.E.....309 North Union St., Tecumseh
Eddy, Mrs. H. Howard.....349 South Main St., Adrian
Fitzsimmons, Mrs. F. J.....3800 Westwood Dr., Adrian
Hammel, Mrs. Richard T.....739 North Union St., Tecumseh
Hamilton, Mrs. John.....1360 Oregon Rd., Adrian
Hanna, Mrs. R. J.....1037 W. Maumee, Adrian
Heffron, Mrs. Charles....748 West Maumee St., Adrian
Heffron, Mrs. Howard.....Rt. 1, Adrian
Heffron, Mrs. Harold.....204 N. Broad, Adrian
Helzerman, Mrs. R. F.....612 W. Chicago Blvd., Tecumseh
Hewes, Mrs. William H.....11 Oregon Rd., Adrian
Hinshaw, Mrs. Warren.....950 Riverside, Adrian
Howland, Mrs. Frank.....563 S. Winter, Adrian
Hunter, Mrs. T. Bailey....114 E. Michigan Ave., Adrian
Marsh, Mrs. R. G. B.....610 W. Logan St., Tecumseh
Miller, Mrs. P. Lynn.....17 Westwood Dr., Adrian
Parker, Mrs. Donald A.....454 S. Main, Adrian
Pasternacki, Mrs. A.....20 Oregon Dr., Adrian
Patmos, Mrs. Bernard.....16 Maumee Court, Adrian
Phelan, Mrs. Alvin J.....505 Seneca St., Adrian
Rogers, Mrs. J. D.....1232 W. Maple Ave., Adrian
Sayre, Mrs. P. P.....228 South Main St., Onsted
Stafford, Mrs. L. J.....8 Westwood Dr., Adrian
Thompson, Mrs. J. R.....529 Dennis St., Adrian
Whitehouse, Mrs. Keith H.....128 Summit St., Morenci
Whitney, Mrs. Oat.....443 State St., Adrian
Wilson, Mrs. George.....108 Jackson Rd., Clinton
Wynn, Mrs. George H.....1115 W. Maumee, Adrian

LIVINGSTON COUNTY

Barton, Mrs. T. A.....100 Lucy Road, Howell
Clarke, Mrs. Niles.....723 Spencer Rd., Brighton
Hauer, Mrs. R. F.....Fowlerville
Hendren, Mrs. J. J.....Fowlerville
Hill, Mrs. H. C.....320 Madison St., Howell
Huntington, Mrs. H. G.....219 S. Walnut St., Howell
Johnson, Mrs. Edwin A.....Howell
May, Mrs. Louis A.....924 W. Grand River, Howell
McGregor, Mrs. A. J.....995 E. Main St., Brighton
Polack, Mrs. Robert.....416 S. Michigan, Howell
Sigler, Mrs. Hollis.....309 N. Michigan, Howell
Walker, Mrs. E. G.....4485 Cordley Lake Rd., Lakeland
Woodworth, Mrs. Edwin.....422 South Lake, Howell

MACOMB COUNTY

Banting, Mrs. Oswald F.....Richmond
Barker, Mrs. J. C.....22420 Statler Blvd., St. Clair Shores
Bower, Mrs. A. B.....Armada
Brady, Mrs. Milo J.....6002 Gunston, Detroit
Bryce, Mrs. James W.....22476 Lange, St. Clair Shores
Buckley, Mrs. Daniel....160 S. Walnut St., Mt. Clemens
Charbeneau,, Mrs. Patrick....33 Hollywood, Mt. Clemens
Croman, Mrs. J. M., Jr.....131 Market, Mt. Clemens
Curatolo, Mrs. Victor.....28 Breitmeyer Place, Mt. Clemens
Dudzinski, Mrs. E. J.....36818 Main, New Baltimore
Engels, Mrs. John A.....36050 Friday, Richmond
Hartmann, Mrs. Waldemar B.....43481 Gratiot Ave., Mt. Clemens
Heine, Mrs. Austin....38567 Riverside Dr., Mt. Clemens

Herrington, Mrs. Clark.....629 Chippewa, Mt. Clemens
Kane, Mrs. Peter.....1340 Hampton, Mt. Clemens
Kane, Mrs. William J.....171 North, Mt. Clemens
Maguire, Mrs. A. J.....45463 Van Dyke, Utica
Martin, Mrs. Wm. L.....262 Sisson, Romeo
Matthews, Mrs. Chris.....135 Riverside, Mt. Clemens
Moore, Mrs. Geo. F.....20 Kendrick, Mt. Clemens
Mulligan, Mrs. P. T.....59 Ahrens Ave., Mt. Clemens
Peltier, Mrs. Stanley J.....151 North, Mt. Clemens
Persson, Mrs. G. A.....198 S. Gratiot, Mt. Clemens
Reichman, Mrs. J. J.....70 Gallup, Mt. Clemens
Reitzel, Mrs. R. H.....1 Breitmeyer Pl., Mt. Clemens
Revere, Mrs. J. O.....192 S. Gratiot, Mt. Clemens
Rivard, Mrs. C. L.....32926 Jefferson, St. Clair Shores
Rourke, Mrs. Robert S.....3390 Piquette, Detroit
Rousseau, Mrs. D. J.....863 Harrington, Mt. Clemens
Salot, Mrs. R. F.....11 Breitmeyer Place, Mt. Clemens
Siegfried, Mrs. E. G.....77 Scott, Mt. Clemens
Smith, Mrs. M. C.....117 Lodewyck, Mt. Clemens
Stryker, Mrs. Oscar.....31032 Jefferson Ave., St. Clair Shores
Stubbs, Mrs. Clayton.....126 S. Gratiot, Mt. Clemens
Stubbs, Mrs. Harold W.....29240 Grandview Ave., Mt. Clemens
Thompson, Mrs. A. A.....35 Miller St., Mt. Clemens
Ullrich, Mrs. R. W.....316 N. Gratiot, Mt. Clemens
Wellard, Mrs. Henry C.....204 Alfred, New Baltimore
Whitley, Mrs. A.....21707 Erben Dr., St. Clair Shores
Wiley, Mrs. D. B.....45223 Cass Ave., Utica
Wolfson, Mrs. V. H.....64 Riverside Dr., Mt. Clemens
Wyte, Mrs. William C.....170 Eastman, Mt. Clemens

MARQUETTE-ALGER COUNTIES

Acocks, Mrs. James.....Morgan Heights, Marquette
Amolsch, Mrs. Arthur L.....321 Pine St., Marquette
Baron, Mrs. B. C.....514 Superior, W., Munising
Bennett, Mrs. Matthew C.....409 E. Ohio, Marquette
Bertucci, Mrs. Joseph.....517 N. Pine, Ishpeming
Bolitho, Mrs. T. B.....425 E. Mich. Ave., Marquette
Bottom, Mrs. C. N.....624 N. Third, Marquette
Burke, Mrs R. A.....Palmer
Casler, Mrs. Wilbur L.....127 East Ridge, Marquette
Cooperstock, Mrs. M.....402 E. Ridge, Marquette
d'Adesky, Mrs. R.....1115 Second, Marquette
Drury, Mrs. Charles P.....414 E. Hewitt, Marquette
Elzinga, Mrs. E. R.....415 E. Hewitt, Marquette
Erickson, Mrs. A. N.....621 N. 4th, Ishpeming
Hettle, Mrs. Paul J.....337 E. Hewitt, Marquette
Hornbogen, Mrs. D. P.....320 Cedar St., Marquette
Howe, Mrs. Lloyd W.....453 E. Michigan, Marquette
Jaedecke, Mrs. R. G.....1427 N. 2nd St., Ishpeming
Knutson, Mrs. George O.....120 Main St., Negaunee
Kronschnabel, Mrs. E. J.....Gwinn
Lambert, Mrs. W. C.....347 Ridge, Marquette
Lyons, Mrs. James.....Lakewood, Marquette
Markham, Mrs. Isabel.....401 N. 4th, Marquette
Matthews, Mrs. Norman.....123 E. Park, Marquette
Moore, Mrs. Bert.....U. S. 41, Negaunee
Narotzky, Mrs. A. S.....628 E. Ridge St., Ishpeming
Rosenbaum, Mrs. Louis.....2004 Deer Lake, Ishpeming
Stewart, Mrs. Landis C.....726 Spruce, Marquette
Swinton, Mrs. A. L.....430 E. Arch, Marquette
Wickstrom, Mrs. G. B.....223 Lynn St., Munising
Williams, Mrs. R. C.....Deer Lake, Ishpeming

MASON COUNTY

Bacon, Mrs. Herbert.....125 W. State St., Scottville
Boldyreff, Mrs. E. E.....Custer
Boon, Mrs. Floyd.....702 W. Court St., Ludington
Hoffman, Mrs. H. B.....201 N. Washington Ave., Ludington
Martin, Mrs. W. S.....107 W. Ludington, Ludington
Paukstis, Mrs. Chas....502 N. Lakeshore Dr., Ludington
Scott, Mrs. R. R.....806 E. Brother St., Ludington
Spencer, Mrs. C. M.....Scottville
Switzer, Mrs. G. A.....302 Lake Shore Dr., Ludington

MECOSTA-OSCEOLA-LAKE COUNTIES

Bruggema, Mrs. Jacob.....621 N. Main St., Evart
Campbell, Mrs. J. B.....320 Division St., Big Rapids
Chess, Mrs. Leo.....417 W. Upton, Reed City
Franklin, Mrs. Ben.....Remus
Haldeman, Mrs. J.....228 S. Warren, Big Rapids
Hickox, Mrs. Leland.....211 Rose Ave., Big Rapids
Ivkovich, Mrs. Paul.....335 West Upton, Reed City
Kazmers, Mrs. E.....Lakeview
Kelsey, Mrs. Leo F.....Lakeview
Kilmer, Mrs. David.....303 State St., Reed City
Kilmer, Mrs. Paul B.....350 W. Upton, Reed City
Kowaleski, Mrs. Edward.....Remus
Marston, Mrs. L. L.....Lakeview
Merlo, Mrs. F. A.....206 S. Michigan, Big Rapids
Nelson, Mrs. Lorenzo.....Baldwin
Treynor, Mrs. Thomas P.....107 Ives Ave., Big Rapids
Tyson, Mrs. J. A.....124 Mecosta, Big Rapids
Van Auken, Mrs. Edw.....229 S. Warren, Big Rapids
Walters, Mrs. J. E.....201 Sanborn Ave., Big Rapids
White, Mrs. J. A.....123 Cedar St., Big Rapids
Yeo, Mrs. Gordon.....209 Rust St., Big Rapids

MENOMINEE COUNTY

Agneberg, Mrs. N.....221-1st St., Menominee
Brukardt, Mrs. H. R.....714-14th Ave., Menominee
Clay, Mrs. Joel.....1031 First St., Menominee
Dewane, Mrs. F. J.....1409-7th St., Menominee
Flanagan, Mrs. C. B.....915-11th Ave., Menominee
Glickman, Mrs. L. G.....1603-32nd Ave., Menominee
Gonty, Mrs. Arthur.....Frontenac Beach, Menominee
Heidenreich, Mrs. J. R.....Daggett
Jones, Mrs. W. S. Sr.....101-15th Ave., Menominee
Jones, Mrs. W. S. Jr.....1834-1st St., Menominee
Kerwell, Mrs. K. C.....Stephenson
Olson, Mrs. Robert C.....1713-22nd Ave., Menominee
Peterson, Mrs. A. R.....Daggett
Towey, Mrs. J. W.....Pinehurst Sanatorium, Powers
Whitmarsh, Mrs. Thomas.....Stephenson

MIDLAND COUNTY

Ballmer, Mrs. Robert.....1111 W. Sugnet Rd., Midland
Berneir, Mrs. Joseph.....Box 26, Sanford
Blackhurst, Mrs. Robert..306 W. Meadowbrook, Midland
Bowsher, Mrs. Robert.....901 St. Andrews, Midland
Bridge, Mrs. Robert.....409 St. Andrews, Midland
Buskirk, Mrs. Maurice.....310 W. Nelson, Midland
Carsons, Mrs. Adah.....1414 Sugnet Rd., Midland
Devlin, Mrs. James.....210 E. Meadowbrook, Midland
Gay, Mrs. Harold.....4589 Ruhle Rd., Rt. 1, Coleman
Gordon, Mrs. Harold.....4113 Castle Dr., Midland
Gronemeyer, Mrs. Wm.....1009 St. Andrews, Midland
Holder, Mrs. B. B.....534 Woodcock, Rt. 2, Midland

Howe, Mrs. Irvin.....1115 Sugnet Rd., Midland
Howell, Mrs. Richard.....710 Maple St., Midland
Ittner, Mrs. Martin.....509 W. Sugnet, Midland
Kaasa, Mrs. Laurin.....2011 Ashman, Midland
Lansborough, Mrs. Hester.....127 W. Nelson, Midland
Linsenmann, Mrs. Karl.....2604 Manor Dr., Midland
MacCallum, Mrs. Charles.....1684 W. Sugnet Rd., Midland
Maynard, Mrs. William.....Coleman
Meisel, Mrs. Edward H.....413 Lingle Lane, Midland
Moench, Mrs. G. Frederick.....147 Center Rd., Sanford
Murphy, Mrs. J. E.....15 Dartmoor Pl., Midland
O'Hora, Mrs. Bernard.....210 E. Sugnet, Midland
Pike, Mrs. Melvin.....220 W. Nelson, Midland
Poznak, Mrs. Leonard.....1411 Crane Ct., Midland
Randalph, Mrs. S. H.....410 Jerome, Midland
Sherk, Mrs. Joseph.....161 Revere St., Midland
Willison, Mrs. C. H.....3812 Greenfield Ct., Midland

MONROE COUNTY

Barker, Mrs. Vincent.....104 W. Noble Ave., Monroe
Barrett, Mrs. Clarence D.....2133 Hollywood, Monroe
Blakey, Mrs. Leonard C.....330 Godfroy Ave., Monroe
Bond, Mrs. Wm. W.....475 Hollywood Dr., Monroe
Douglas, Mrs. Dale W.....519 Borgess Ave., Monroe
Dusseau, Mrs. S. V.....Erie
Ewing, Mrs. Robt. T.....201 N. Macomb St., Monroe
Flanders, Mrs. J. P.....1434 Hurd Rd., Monroe
Frary, Mrs. R. A.....505 Strassburg Rd., Rt. 1, Monroe
Freud, Mrs. J. W.....212 Hollywood Dr., Monroe
Gelhaus, Mrs. W. J.....623 Scottwood, Monroe
Hunter, Mrs. Marion A.....606 E. Elm, Monroe
Kelso, Mrs. S. N., Jr.....336 Cole Rd., Monroe
Laboe, Mrs. E. W.....424 Hollywood Dr., Monroe
Lammers, Mrs. J. P.....Ida
Lapp, Mrs. Charles.....Luna Pier
Loan, Mrs. George B.....1043 Riverview, Monroe
Long, Mrs. Edgar C.....715 Hollywood Dr., Monroe
McDonald, Mrs. T. A.....467 Hollywood Dr., Monroe
McMillan, Mrs. J. H.....417 E. Elm Ave., Monroe
Meier, Mrs. Walter.....306 S. Macomb, Monroe
Middleton, Mrs. Wm. J. S.....465 Borgess, Monroe
Reisig, Mrs. A. H.....430 Hollywood Dr., Monroe
Sanger, Mrs. E. J.....716 Hollywood Dr., Monroe
Siffer, Mrs. J. H.....32 S. Macomb St., Monroe
Sisman, Mrs. Bernard.....524 Hollywood, Monroe
Streicher, Mrs. R. G.....315 Colonial Dr., Monroe
Tomlinson, Mrs. Ledyard H.....Newport
Wagar, Mrs. Spencer.....711 Hollywood Dr., Monroe
Weeks, Mrs. Vernon.....119 Sylvan Dr., Monroe
Wilkins, Mrs. Rolland W.....4940 W. Alban, Monroe
Williams, Mrs. R. J.....306 Godfroy Ave., Monroe

MUSKEGON COUNTY

Allen, Mrs. Richard T.....2246 Estes St., Muskegon
August, Mrs. Ralph.....64 W. Larch, Muskegon
Beers, Mrs. Charles.....67 Crescent, Muskegon Heights
Bloom, Mrs. Robert E.....1440 Winchester, Muskegon
Bolthouse, Mrs. Robert.....1641 Jefferson, Muskegon
Bond, Mrs. William.....1724 Peck St., Muskegon
Bradshaw, Mrs. Park....636 Ruddiman, North Muskegon
Busard, Mrs. R. I.....3910 Highgate, Muskegon
Christopherson, Mrs. J. W.....1276 Lakeshore, Muskegon
Clapp, Mrs. H.....1585 Glen, Muskegon
Clark, Mrs. Harry.....1450 Leahy, Muskegon
Closz, Mrs. Harold.....1727 Jefferson St., Muskegon
DeLeeuw, Mrs. Henry.....2144 Peck St., Muskegon
Dykhuizen, Mrs. Harold.....962 W. Mona Brook Rd., Muskegon
Ellis, Mrs. Nicholas.....1883 Lakeshore Dr., Muskegon
Emerick, Mrs. R.....1714 Leahy, Muskegon
Fleischman, Mrs. Charles.....1573 Jefferson, Muskegon
Fleischman, Mrs. Norman.....1310 Moulton, North Muskegon
Fles, Mrs. R. J.....1715 Peck St., Muskegon
Folsom, Mrs. John.....2488 Pine Grove, Muskegon
Gaikema, Mrs. E. W.....605 First St., North Muskegon
Garber, Mrs. Frank.....703 Ruddiman, North Muskegon
Griffith, Mrs. Robert.....1323 Fourth, Muskegon
Hack, Mrs. Donald W.....3875 Lake Harbor, Muskegon
Hanley, Mrs. William.....2535 Pine Grove, Muskegon
Harryman, Mrs. James,.....1694 Jefferson St., Muskegon
Hartwell, Mrs. Shattuck.....1665 Jefferson, Muskegon
Harvey, Mrs. J. C. Klemm....3163 Scenic Dr., Muskegon
Heneveld, Mrs. Edward.....82 W. Dale Ave., Muskegon
Heneveld, Mrs. John.....4036 Stanford, Muskegon
Heneveld, Mrs. Robert.....1458 Montague St., Muskegon
Hill, Mrs. J. K.....5463 Holton Rd., Twin Lakes
Holly, Mrs. Leland.....3349 Scenic Dr., Muskegon
Hornbeck, Mrs. W. J.....2510 Pine Grove, Muskegon
Jesson, Mrs. Robert M.....2344 Fifth, Muskegon Hts.
Joisted, Mrs. Arthur.....Interlocken, Mid Oak Dr., North Muskegon
Kane, Mrs. Thom.....1185 Scenic Dr., Muskegon
Kerr, Mrs. Howard....2378 Hadden, Glenside, Muskegon
Kleaveland, Mrs. Justin.....654 Wendover, Roodmont. Muskegon
Lapham, Mrs. Landon.....123 Colby, Whitehall
Lauretti, Mrs. Emil J.....1693 Jefferson St., Muskegon
Laurin, Mrs. V. S.....3319 Scenic Dr., Muskegon
LeFevre, Mrs. Louis.....730 Lake Dr., North Muskegon
LeFevre, Mrs. William.....3033 Scenic Dr., Muskegon
Loder, Mrs. L. L.....Circle Dr., North Muskegon
Lowry, Mrs. Robert A.....1840 Fifth, Muskegon
MacLean, Mrs. Donald B.....659 Lake Dr., North Muskegon
Maples, Mrs. Douglas....814 Moulton, North Muskegon
McNair, Mrs. John.....7395 Glen Ave., Muskegon
Medema, Mrs. Paul.....1661 Clinton St., Muskegon
Meengs, Mrs. Marvin.....972 Randall Rd., Muskegon
Miller, Mrs. Phillip L.....2035 Leahy, Muskegon Heights
Morford, Mrs. Fred E.....Hamilton Apts., Muskegon
Mulder, Mrs. Lambertus.....1085 Apple, Muskegon
Mulligan, Mrs. A. W.....123 W. Larch, Muskegon
Oden, Mrs. C. L. A.....1593 Jefferson, Muskegon
Paterson, Mrs. L. C.....2042 Seminole Rd., North Muskegon
Pettinga, Mrs. F. L.....834 E. Isabella Ave., Muskegon
Prentice, Mrs. Edwin.....2325 Westwood Dr., Glenside, Muskegon
Price, Mrs. Leonard.....1182 Terrace St., Muskegon
Risk, Mrs. Robert D.....3980 Highgate Ave., Roodmont, Muskegon
Scholle, Mrs. Norbert....635 Cambridge Rd., Roodmont, Muskegon
Shebesta, Mrs. E. M.....2342 Westwood Rd., Glenside, Muskegon
Stone, Mrs. M. E.....1541 Peck, Muskegon
Stubbart, Mrs. F. James.....2417 Hadden, Muskegon
Swenson, Mrs. Leland L.....3503 Scenic Dr., Muskegon
Teifer, Mrs. Charles.....1652 Peck St., Muskegon
Tellman, Mrs. H. C.....590 Ranch Rd., Muskegon
Thornton, Mrs. Eugene S.....Interlaken Circle Dr., North Muskegon
Tyler, Mrs. William.....1572 Jefferson, Muskegon
Vandervelde, Mrs. Clarence.....4042 Loomis, Muskegon
VanGelder, Mrs. William C.....626 Cambridge, Muskegon
Wagenaar, Mrs. Edward.....164 Catherine, Muskegon
White, Mrs. Warren G.....1185 Harbor Pt. Dr., Muskegon
Wiersema, Mrs. Silas.....1337 Peck, Muskegon
Wildgen, Mrs. Bernard..975 W. Seminole Rd., Muskegon
Wilson, Mrs. Pitt.....625 Miller Dr., N. Muskegon

NEWAYGO COUNTY

Black, Mrs. Lulu.....Holton
Geerlings, Mrs. L. J.....6726 Lake Drive, Fremont
Geerlings, Mrs. Willis.....28 East Oak, Fremont
Klein, Mrs. J. Paul.....40 East Pine St., Fremont
Masters, Mrs. B. L.....415 E. Maple, Fremont
O'Neill, Mrs. John W.....White Cloud
Paxton, Mrs. Robert.....221 S. Stewart, Fremont
VandenBerg, Mrs. Tunis.....413 E. Oak, Fremont
Veenschoten, Mrs. Girard.....Hesperia

NORTH CENTRAL COUNTIES

Barstow, Mrs. Richard D.....220 E. Sheldon, Gaylord
Boehm, Mrs. J. D.....West Branch
Clipper, Mrs. C. G.....Lake Margrethe, Grayling
Crandall, Mrs. C. H.....West Branch
Egle, Mrs. Joseph L.....Northern T.B. San, Gaylord
Hasty, Mrs. Earl.....115 Burgess, West Branch
Henig, Mrs. B. E.....604 Peninsular, Grayling
Jardine, Mrs. Hugh.....109 S. Third, West Branch
Libke, Mrs. R. S.....E. Main St., Gaylord
McKillop, Mrs. Gordon.....303 E. Main, Gaylord
Mikan, Mrs. V. Robert.....Houghton Lake
Oppy, Mrs. Charles L.....Roscommon
Peckham, Mrs. R. C.....N. Center St., Gaylord
Rodda, Mrs. F. H.....Lake Margrethe, Grayling
Smith, Mrs. Sidney.....199 N. Fairview, West Branch
Timreck, Mrs. H. A.....Gladwin
Van Osten, Mrs. O. A.....115 Burgess, West Branch

NORTHERN MICHIGAN COUNTIES

Allen, Mrs. Robert.....Lincoln Place, Petoskey
Alm, Mrs. Bernard.....418 Petoskey Rd., Petoskey
Cameron, Mrs. Wm.....E. Bay View, Petoskey
Crippen, Mrs. Edward.....Mancelona
Grate, Mrs. L. E.....101 S. Prospect, Charlevoix
Lawrie, Mrs. Guy.....816 Spruce, Petoskey
Lilga, Mrs. H. V.....929 Michigan, Petoskey
Mateskon, Mrs. V. S.....909 Spruce Street, Petoskey
McKnight, Mrs. Robert.....627 Michigan, Petoskey
Pearson, Mrs. Robert.....Boyne City
Reus, Mrs. Leonard.....729 Lockwood Avenue, Petoskey
Saltonstall, Mrs. G. B.....429 Michigan, Charlevoix

OAKLAND COUNTY

Abbott, Mrs. Vernon.....111 Illinois, Pontiac
Albrecht, Mrs. Robert.....549 Grisdale, Keego Harbor
Arnkoff, Mrs. Harry.....140 Illinois, Pontiac
Aschenbrenner, Mrs. Zac....23240 Power Rd., Farmington
Aulie, Mrs. Hal G.....1219 E. Dallas, Royal Oak
Baker, Mrs. Robert.....1129 Fairfax, Birmingham
Bannow, Mrs. R. J.....23 Keswik, Bloomfield Hills
Barker, Mrs. Chas.....1371 Club Drive, Pontiac
Barker, Mrs. Howard.....Martell Dr., Bloomfield Hills
Bauer, Mrs. Bruce.....29424 Sherry, Royal Oak
Bauer, Mrs. Ernest W.....48 W. Roberts, Hazel Park
Beattie, Mrs. W. G.....314 W. Maplehurst, Ferndale
Belknap, Mrs. Warren F.....2020 Roseland, Royal Oak
Blackwell, Mrs. Leonard.....51 Niagara, Pontiac
Blakeney, Mrs. James.....17 Utica, Pontiac
Boucher, Mrs. R. E.....5451 Brookdale, Birmingham
Bowers, Mrs. Chas.....199 Barrington, Pontiac
Bradley, Mrs. E. L.....231 Starr, Pontiac
Brown, Mrs. Arnold L.....7899 Cooley Lake Rd., Pontiac
Budd, Mrs. Alexander....440 Lake Park Dr., Birmingham
Bullard, Mrs. R. W.....8301 Foster Rd., Clarkston
Burke, Mrs. Chauncey G.....1123 Glengary Circle, Birmingham
Campbell, Mrs. M. D.....3 Sylvan Ave., Pleasant Ridge
Cefai, Mrs. A. F.....42 Miami Rd., Pontiac
Chandler, Mrs. Douglas.....391 Hamilton, Birmingham
Christensen, Mrs. W. L.....31100 Marlin Ct. Southfield Twp., Birmingham
Christie, Mrs. Edward.....632 Ardmore, Birmingham
Cline, Mrs. Allan L.....82 Bloomfield Terrace, Pontiac
Cobb, Mrs. Leon.....2378 Maplewood, Pontiac
Cobb, Mrs. Thomas.....4415 Motorway Dr., Pontiac
Cudney, Mrs. Ethan.....159 Marlborough, Pontiac
Darling, Mrs. C. G.....Lone Pine Ct., Bloomfield Hills
Delaney, Mrs. Malcolm....23040 Valley View, Farmington
DeLawter, Mrs. H. H.....1298 Brookwood Lane, Birmingham
Derr, Mrs. William.....7 Fairwood, Pleasant Ridge
Deutsch, Mrs. Wm. L.....26695 York, Huntington Woods
Dobski, Mrs. Edwin.....3350 Eastpointe Lane, Rt. 3, Pontiac
Dunn, Mrs. Lewis E.....18760 San Diego Dr., Birmingham
Durocher, Mrs. Norman E.....2880 Old Orchard Dr., Pontiac
Dustin, Mrs. Robert.....498 Merritt Lane, Birmingham
Ekelund, Mrs. C. T.....149 Ottawa Dr., Pontiac
Elder, Mrs. Edward, Jr.....230 Starr, Pontiac
Endress, Mrs. Zac F.....Tiverton Rd., Bloomfield Hills
Esslinger, Mrs. John.....191 Frank St., Birmingham
Evseef, Mrs. Geo.....2685 Amberly, Birmingham
Fink, Mrs. L. J.....9 Ottawa Drive, Pontiac
Flick, Mrs. Verg C.....12962 Vernon, Huntington Woods
Foust, Mrs. E. W.....28145 Lathrup, Birmingham
Fox, Mrs. Ralph M.....230 Westwood, Birmingham
Furlong, Mrs. Harold.....207 Navajo Rd., Pontiac
Gadbaw, Mrs. Joseph J.....33925 Oakland Ave., Farmington
Gaensbauer, Mrs. Ferd.....217 Illinois, Pontiac
Galpin, Mrs. Richard.....937 Henley Dr., Birmingham
Gariepy, Mrs. Bernard.....312 Park, Royal Oak
Gates, Mrs. E. M.....3200 Allen Rd., Ortonville
Gehringer, Mrs. N. F.....400 Yarmouth, Birmingham
Geist, Mrs. E.....2035 Pontiac Rd., Rochester
Gerls, Mrs. Frank.....536 W. Huron, Pontiac
Gibson, Mrs. Richard.....1011 Hazel, Birmingham
Gibson, Mrs. Wellington.....216 Commerce St., Milford
Gill, Mrs. Mathew J.....3115 Franklin Rd., Pontiac
Goode, Mrs. Norman J., Jr.....302 E. Maryland, Royal Oak
Green, Mrs. Ralph.....24100 Stratford, Oak Park
Haanes, Mrs. Merle.....70 Spokane, Pontiac
Hackett, Mrs. Daniel J.....782 Owego Dr., Pontiac
Haddock, Mrs. Douglass.....5800 Pontiac Trail, RFD No. 5, Pontiac
Hardy, Mrs. Geo. C.....240 Oak Lane, Route No. 2, Rochester
Hasner, Mrs. Robert.....1712 Sycamore, Royal Oak
Henderson, Mrs. James R.....4 Barbour Terrace, Bloomfield Hills
Hendren, Mrs. Owen....Pembroke Drive, Bloomfield Hills
Henry, Mrs. Colonel R.....11 Oakland Pk., Pleasant Ridge
Hershey, Mrs. Lynn N.....31275 Franklin Rd., Birmingham
Hoekman, Mrs. A.....1470 Hamilton, Pontiac
Howlett, Mrs. E. V.....1029 James K Blvd., Pontiac
Hoyt, Mrs. D. F.....7530 Maceday Lake Rd., Clarkston
Hubert, Mrs. John....4955 Stoneyleigh, Bloomfield Hills
Ignatius, Mrs. V.....1020 E. Nine Mile Rd., Ferndale
Jacobi, Mrs. Rodman C.....69 Drahner, Oxford
Keeffe, Mrs. E.....468 Williamsbury, Bloomfield Hills
Kemp, Mrs. F. J.....85 Barrington Rd., Pontiac

Kemp, Mrs. Lloyd.....1055 Yarmouth, Birmingham
Kendrick, Mrs. H. F.....260 Cherokee, Pontiac
Koehler, Mrs. Wm.....1907 W. Houstonia, Royal Oak
LaCore, Mrs. Ivan.....Pontiac State Hosp. Grounds, Pontiac
Lahti, Mrs. Paul T.....315 Fairfax, Birmingham
LaMarche, Mrs. Norman.....4139 Wakefield, Berkley
Landry, Mrs. Roy A.....3380 Caseyburn, Drayton Plains
Larson, Mrs. A. R.....2640 Woodbine Dr., Pontiac
Levine, Mrs. Bernard.....24081 Geneva, Oak Park
Lichtwardt, Mrs. Harry.....4805 N. Harsdale, Bl. Twp., Birmingham
Lilly, Mrs. Richard.....865 Norwich, Birmingham
Ling, Mrs. Theodore W.....33221 Shiawassee, Farmington
Linn, Mrs. Herman J.....23541 Hollander, Dearborn
Lowery, Mrs. A. J.....8125 Mario, Pontiac
Lyons, Mrs. R. T.....200 Oneida, Pontiac
Markley, Mrs. John.....387 W. Iroquois, Pontiac
Marra, Mrs. John J.....1430 Nokomis Dr., Lake Orion
Mason, Mrs. Robert.....564 Overhill, Birmingham
Maxim, Mrs. Edward..2635 Hickory Ct., Rt. 3, Pontiac
McCain, Mrs. French.....788 Puritan, Birmingham
McConkie, Mrs. J. P.....2425 W. Lincoln, Birmingham
McHugh, Mrs. James.....Pontiac State Hosp. Grounds, Pontiac
McInery, Mrs. Thomas S.....2026 Laurome, Royal Oak
Mehas, Mrs. Constantine.....300 Hickory Grove Rd., Bloomfield Hills
Meisner, Mrs. H. E.....12910 Oak Pk., Oak Park
Mercer, Mrs. Frank.....87 Ottawa Dr., Pontiac
Miller, Mrs. H. L.....1932 Greenleaf, Royal Oak
Miller, Mrs. Sidney.....709 Tottenham, Birmingham
Monroe, Mrs. John.....55 Neome, Pontiac
Morton, Mrs. James.....516 Waddington, Birmingham
Nalepa, Mrs. Eugene.....2332 Rutherford Rd., Pontiac
Naz, Mrs. John N.....2826 Orange Grove, R. No. 7, Pontiac
Neafie, Mrs. C. A.....493 Orchard Lake Rd., Pontiac
Norup, Mrs. John.....1772 Edgewood, Berkley
Nosanchuk, Mrs. Joseph.....197 Cherokee Rd., Pontiac
Olsen, Mrs. R. E.....3325 Franklin Rd., Pontiac
Palmer, Mrs. Hayden.....269 Ottawa, Pontiac
Patrick, Mrs. Charles.....4350 Pontiff, Waterford
Payton, Mrs. Chas. F.....1002 Pilgrim, Birmingham
Pearce, Mrs. James F.....10855 Hart, Huntington Woods
Petroff, Mrs. George N.....219 Cherokee, Pontiac
Porritt, Mrs. Ross.....131 Chippewa, Pontiac
Prather, Mrs. F. W.....701 E. Liberty, Milford
Prevette, Mrs. W. C.....291 Liberty, Pontiac
Prosser, Mrs. M. G.....2854 Orangegrove, Pontiac
Quinn, Mrs. James R.....223 Marlborough, Pontiac
Raynale, Mrs. Geo. P.....423 Tooting Lane, Birmingham
Read, Mrs. J. A.....175 E. Hickory Grove, Birmingham
Rech, Mrs. William.....1568 Welch Rd., Walled Lake
Reid, Mrs. Fred T.....18450 Riverside Dr., Birmingham
Riggs, Mrs. Harry L.....3499 Franklin Rd., Pontiac
Riker, Mrs. Aaron D.....4050 Commerce Rd., Pontiac
Rupp, Mrs. E. C.....202 Crane Ave., Royal Oak
Rush, Mrs. Alva D.....464 Townsend, Birmingham
Russell, Mrs. V. P.....9 Elm Park, Pleasant Ridge
Ruva, Mrs. Joseph.....1280 Club Dr., Pontiac
Sansone, Mrs. T. J.....2184 Somerset Rd., Pontiac
Schmitt, Mrs. Phillip E.....18440 Greenfield, Detroit 35
Schuneman, Mrs. Howard.....1312 Vinsetta, Royal Oak
Segula, Mrs. Robert.....6811 Williams Lake Rd., Drayton Plains
Sempere, Mrs. Chas.....2225 Avondale, Pontiac
Sewell, Mrs. George R.....382 Elmhurst, Highland Park
Shadley, Mrs. Maxwell.....94 Ottawa Dr., Pontiac
Sheffield, Mrs. L. S.....4641 Motorway Dr., Pontiac
Sheridan, Mrs. Michael.....10415 Lincoln, Huntington Woods
Smith, Mrs. D. S.....135 Wenonah Dr., Pontiac
Somers, Mrs. Donald C.....4205 Valley Forge, Birmingham
Sosin, Mrs. Allen.....13342 N. Norfolk, Detroit
Spoehr, Mrs. Eugene.....17 Elm Park, Pleasant Ridge
Spohn, Mrs. Earl.....414 Hendrie Blvd., Royal Oak
Stageman, Mrs. John....6065 Middle Lake Rd., Clarkston
Stahl, Mrs. Harold.....850 Lapeer Rd., Oxford
Stanley, Mrs. William.....24 Cambridge Blvd., Pleasant Ridge
Stein, Mrs. Edward.....24060 Condon, Oak Park
Steffes, Mrs. E. M.....1724 Beverly Blvd., Berkley
Steinberg, Mrs. Norman N.....26550 Dundee Rd., Huntington Woods
Stuecheli, Mrs. Milton....1084 Willow Lane, Birmingham
Sutton, Mrs. Palmer E.....1617 Vinsetta, Royal Oak
Swickle, Mrs. Edward.....2643 Burnham, Royal Oak
Uloth, Mrs. M. J.....92 South St., Ortonville
Vanden Berg, Mrs. K.....4045 Lakewood, Pontiac
Van Haltern, Mrs. Harold.....2670 Erie Dr., Pontiac
Van Zoeren, Mrs. Jay....1645 Derby Rd., Birmingham
Virga, Mrs. Geo. M.....1602 Cedar Hill, Royal Oak
Wake, Mrs. Douglas.....1406 Woodsboro, Royal Oak
Weber, Mrs. Gerard.....169 Alice, Pontiac
Webber, Mrs. Lynn.....7315 Sanatorium, Pontiac
Wessels, Mrs. Robert.....2152 Tottenham, Birmingham
White, Mrs. R. Hamilton....552 Monhegan, Birmingham
Whitehouse, Mrs. J.....1136 Selfridge, Clawson
Wigent, Mrs. Ralph.....101 Mohawk, Pontiac
Williams, Mrs. John....6570 Commerce Lake Rd., Pontiac
Zimmerman, Mrs. Walter.....32340 Sylvan Lane, Birmingham
Zujko, Mrs. Alphonse J.....132 Illinois, Pontiac

OTTAWA COUNTY

Beernink, Mrs. E. H.....430 Duncan Ct., Grand Haven
De Vries, Mrs. Peter....526 Lafayette St., Grand Haven
DeYoung, Mrs. F.....107 Barber Ct., Spring Lake
Frieswyck, Mrs. Melvin.....148 So. Division St., Zeeland
Groat, Mrs. Frank.....633 Franklin, Grand Haven
Hager, Mrs. R.....243 W. Main St., Hudsonville
Heard, Mrs. William.....504 Park St., Grand Haven
Kemme, Mrs. G. J.....Rt. No. 3, Zeeland
Kools, Mrs. Willis.....194 W. 11th St., Holland
Kuipers, Mrs. S. W.....93 E. 29th St., Holland
McArthur, Mrs. Peter.....1719 Wisconsin St., Grand Haven
Ten Have, Mrs. R.....1016 Sheldon, Grand Haven
Ten Pas, Mrs. Henry.....Box 47-Rt. 2, Hamilton
Vender Berg, Mrs. E.....69 W. 14th, Holland
VandeWaa, Mrs. Alfred.....200 E. Main St., Zeeland
Wells, Mrs. Kenneth.....117 E. Savidge, Spring Lake
Westrate, Mrs. Warren.....568 Central Ave., Holland
Westrate, Mrs. Wm., Jr.....55 W. 14th Ave., Holland

SAGINAW COUNTY

Ackerman, Mrs. G. L.....316 Brockway Place, Saginaw
Albers, Mrs. M. J.....218 Ardissi, Saginaw
Alger, Mrs. George.....1057 Brockway Court, Saginaw
Anderson, Mrs. W. K.....935 St. Andrews Rd., Saginaw
App, Mrs. Robert G.....1911 Seminole, Saginaw
Bass, Mrs. Vernon V.....916 Adams St., Saginaw
Bellinger, Mrs. Don H.....215 Garden Lane, Saginaw
Bishop, Mrs. H. M.....28 Benton Rd., Saginaw
Brender, Mrs. F. P.....105 Hubinger, Frankenmuth
Bruggers, Mrs. Lawrence....2543 N. Woodbridge, Saginaw
Bruton, Mrs. Martin F.....1815 Passolt, Saginaw
Bucklin, Mrs. R. V.....2112 Adams Blvd., Saginaw
Bullington, Mrs. B. M.....1924 Handley, Saginaw
Busch, Mrs. F. J.....40 E. Hannum Blvd., Saginaw
Butler, Mrs. M. G.....1440 Hemmeter Rd., Saginaw
Cady, Mrs. Donald.....2230 Hemmeter, Saginaw

Cady, Mrs. F. J.....20 W. Hannum Blvd., Saginaw
Cady, Mrs. F. J., Jr.....61 Benton Rd., Saginaw
Cambridge, Mrs. V. W.....1219 Fitzhugh, Saginaw
Cameron, Mrs. Allan K.....1602 Howard St., Saginaw
Campbell, Mrs. L. A.....335 Brockway Place, Saginaw
Caumartin, Mrs. Hugh T.....1537 S. Washington, Saginaw
Chisena, Mrs. P. R.....6227 Dixie Hwy., Bridgeport
Claytor, Mrs. A. A.....603 N. Third, Saginaw
Comer, Mrs. Walter H.....120 Alice, Saginaw
Cortopassi, Mrs. A. J.....326 S. Washington, Saginaw
Cortopassi, Mrs. V. E.....221 Ardussi, Saginaw
Cory, Mrs. C. W.....No. 4 Ardmore Pl., Saginaw
Curts, Mrs. J. H.....No. 1 East Hannum Blvd., Saginaw
Durman, Mrs. D. C.....1530 Ottawa Blvd., Saginaw
Ely, Mrs. Cecil W.....1820 Janes Ave., Saginaw
Farley, Mrs. A. W., Jr.....2165 Anderson Rd., Saginaw
Feeheley, Mrs. Robert.....1621 Coolidge, Saginaw
Fleschner, Mrs. Thos. E.....744 W. Birch Run Rd., Birch Run
Friedrick, Mrs. David F.....615 Tuscola, Frankenmuth
Gage, Mrs. D. P.....134 Borland St., Saginaw
Galsterer, Mrs. E. C.....417 Brockway Place, Saginaw
Gamon, Mrs. Adam E.....905 N. Michigan, Saginaw
Gardner, Mrs. J. H.....416 Ann Street, Saginaw
Gerard, Mrs. Roy.....2210 N. Madison, Saginaw
Goldner, Mrs. Richard.....2414 Wesley Dr., Saginaw
Gomon, Mrs. L. D.....16 Edgewood Rd., Saginaw
Goodsell, Mrs. John O.....132 Graham St., Saginaw
Goodsell, Mrs. J. Orton.....1607 Cedar, Saginaw
Grigg, Mrs. A. P.....2015 Gratiot, Saginaw
Hand, Mrs. Eugene.....1487 S. Washington St., Saginaw
Harvie, Mrs. L. C.....417 Ardussi, Saginaw
Heavenrich, Mrs. R. M.....225 Garden Lane, Saginaw
Helmkamp, Mrs. H. O.....2311 Mershon, Saginaw
Hester, Mrs. E. G.....225 N. Court, Saginaw
Hill, Mrs. V. L.....1270 Hemmeter Rd., Saginaw
Howell, Mrs. Donald.....2112 Gratiot, Saginaw
Hubinger, Mrs. Herman.....4 Benton Rd., Saginaw
Hutchinson, Mrs. John W.....521 Madison, Saginaw
Hyslop, Mrs. William T.....2008 Harry, Saginaw
Jaenichen, Mrs. Robert.....419 S. Weadock, Saginaw
James, Mrs. J. W.....253 Snow, Saginaw
Jarvi, Mrs. Rudolph.....3051 Congress, Saginaw
Johnstone, Mrs. K. T.....1050 Fisher Drive, Saginaw
Kemp, Mrs. J. N.....1322 S. Michigan, Saginaw
Kempton, Mrs. R. M.....415 Hayden St., Saginaw
Kerr, Mrs. W. B.....1903 Bond St., Saginaw
Keyes, Mrs. James T.....8152 Main, Birch Run
Kickham, Mrs. Edward.....2525 Mershon St., Saginaw
Kolesar, Mrs. R. C.....2032 Harris, Saginaw
Kowals, Mrs. F. V.....1280 Glendale, Saginaw
Kramer, Mrs. Charles G.....1721 Brenner, Saginaw
Kretschmer, Mrs. T. V.....700 Remington, Saginaw
Lassignal, Mrs. Jules C.....1312 State St., Saginaw
Leitch, Mrs. Arthur E.....1100 Hoyt, Saginaw
Ling, Mrs. Kenneth C.....Hemlock
Lohr, Mrs. O. W.....614 Madison, Saginaw
Lohr, Mrs. Thomas O.....1135 N. Michigan, Saginaw
Luger, Mrs. Fred I.....1970 N. River Rd., Saginaw
Lurie, Mrs. Robert I.....58 Davis, Saginaw
MacMeekin, Mrs. J. W.....Center Woods, Saginaw
Mahaney, Mrs. Thomas P.....212 S. Granger, Saginaw
Manning, Mrs. J. Edward.....1627 Brown St., Saginaw
Manning, Mrs. John W., III.....821 Congress, Saginaw
Markey, Mrs. F. L.....2011 Brockway, Saginaw
Markey, Mrs. J. P.....2425 Adams Blvd., Saginaw
Martzowka, Mrs. W. P.....2330 Delaware Blvd., Saginaw
Matthews, Mrs. H. C.....14 Benton Rd., Saginaw
Mayne, Mrs. Harold E.....1585 Glendale, Saginaw
McEwen, Mrs. William.....820 Orchard Ct., Saginaw
McKinney, Mrs. A. R.....1403 Howard St., Saginaw
Meadows, Mrs. Joseph.....2435 N. Bond, Saginaw
Meyer, Mrs. H. J.....6243 Dixie Hwy., Bridgeport
Miller, Mrs. Glen F.....1803½ N. Michigan, Saginaw
Morgrette, Mrs. L. J.....1286 Avalon, Saginaw
Morris, Mrs. K. M.....1826 W. Michigan, Saginaw
Mudd, Mrs. R. D.....1001 Hoyt St., Saginaw
Murphy, Mrs. A. P.....201 Superior, Saginaw
Murray, Mrs. C. R.....1584 Glendale, Saginaw
Murray, Mrs. M. J.....1925 Coolidge Rd., Saginaw
Nelson, Mrs. O. A.....1654 Lathrup, Saginaw
Northway, Mrs. Robert O.....12 Edgewood Rd., Saginaw
Novy, Mrs. F. O.....420 S. Jefferson, Saginaw
Olson, Mrs. C. P. 2505 Court, Saginaw
Ostrander, Mrs. F. W.....Freeland
Phillips, Mrs. H. A.....2420 Adams Blvd., Saginaw
Pietz, Mrs. Frederick.....2139 Gratiot, Saginaw
Potvin, Mrs. C. D.....206 S. Carolina, Saginaw
Powers, Mrs. Robt.....142 Wylie Ct., Saginaw
Prather, Mrs. Perry.....519 Liberty, Saginaw
Prinsell, Mrs. Gustaf.....1614 S. Hamilton, Saginaw
Richards, Mrs. N. W.....2111 Brockway, Saginaw
Richter, Mrs. H. J.....2305 Adams Blvd., Saginaw
Ruskin, Mrs. David B.....246 Lockwood, Saginaw
Ryan, Mrs. R. S.....623 S. Park St., Saginaw
Sample, Mrs. J. T.....602 Rust St., Saginaw
Sargent, Mrs. D. V.....4680 Ashland Dr., Saginaw
Schaiberger, Mrs. Elmer.....10164 Dixie Highway, Birch Run
Schneider, Mrs. A. N.....1902 N. Bond, Saginaw
Sharp, Mrs. M. C.....2202 Barnard St., Saginaw
Sheldon, Mrs. S. A.....2 Holland Court, Saginaw
Siler, Mrs. D. E.....47 Ardmore Pl., Saginaw
Skowronski, Mrs. C. A.....1401 E. Genesee, Saginaw
Skowronski, Mrs. Marion J.....1916 Ring, Saginaw
Slack, Mrs. W. K.....615 S. Jefferson, Saginaw
Slade, Mrs. Homer G.....1667 S. Washington, Saginaw
Smith, Mrs. Chandler.....1605 Hanchett, Saginaw
Stahly, Mrs. E. H.....1900 Coolidge Ave., Saginaw
Stander, Mrs. A. C.....1411 Court St., Saginaw
Stewart, Mrs. G. W.....4343 State Rd., Saginaw
Sulfridge, Mrs. Hugh, Jr.....1485 N. River Rd., Saginaw
Thompson, Mrs. A. B.....2144 Ottawa, Saginaw
Tiedke, Mrs. G. E.....2339 Delaware Blvd., Saginaw
Toshach, Mrs. Clarence.....3655 Schust Rd., Saginaw
Volk, Mrs. V. K.....3340 Hospital Rd., Saginaw
Watson, Mrs. R. S.....730 N. Mason, Saginaw
Weeks, Mrs. E. G.....1413 Howard St., Saginaw
Weidner, Mrs. Garland.....1801 Brenner, Saginaw
Weiss, Mrs. Arno.....4945 Dundale Ct., Saginaw
Westlund, Mrs. Norman.....131 S. Charles, Saginaw
Wright, Mrs. E. M.....128 Lynn, Saginaw
Yntema, Mrs. Stuart.....3 E. Hannum Blvd., Saginaw

ST. CLAIR COUNTY

Bailey, Mrs. Robert.....4579 Lake Shore, Port Huron
Banting, Mrs. Kenneth.....3540 Gratiot Avenue, Port Huron
Battley, Mrs. J. C. S.....2038 Military, Port Huron
Beck, Mrs. F. K.....2902 Military St., Port Huron
Beer, Mrs. J. F.....711 N. Riverside Dr., St. Clair
Benjamin, Mrs. C. C.....3023 Gratiot Ave., Port Huron
Borden, Mrs. Charles....4520 Lake Shore Rd., Port Huron
Bottomley, Mrs. T. H.....4440 Gratiot Ave., Port Huron
Boughner, Mrs. W. F.....Marine City
Carrie, Mrs. Robert.....Marine City
Cleland, Mrs. W. D.....1320 Court Street, Port Huron
Clifford, Mrs. Robert P.....910 N. Riverside, St. Clair
Clyne, Mrs. B. C.....Yale
Coury, Mrs. J. J.....4234 Gratiot Ave., Port Huron
Davison, Mrs. Wm.....2920 Military, Port Huron
Dinnen, Mrs. W. J.....3202 Riverside Dr., Port Huron
Douvas, Mrs. Nicholas.....1712 Court St., Port Huron
Fitzgerald, Mrs. E. W.....4129 Gratiot Ave., Port Huron
Gholz, Mrs. Anthony C.....1407 Court St., Port Huron
Gilmore, Mrs. John R.....4830 Lakeshore, Port Huron
Holcomb, Mrs. R. J.....141 S. Main St., Marine City
Hoyt, Mrs. C. N.....67 Gratiot Blvd., R. 2, Port Huron
Kirban, Mrs. Harry.....6040 Lakeshore Rd., Port Huron

Kirker, Mrs. F. O.....1601 River Rd., St. Clair
Koch, Mrs. Donald A.....4802 Lake Shore Rd., Port Huron
Lauridsen, Mrs. James....2833 Gratiot Ave., Port Huron
Licker, Mrs. R. R.....215 Gratiot Blvd., Rt. 2, Marysville
Ludwig, Mrs. Claude.....3550 Stone St., Port Huron
Ludwig, Mrs. Fred.....2864 Military, Port Huron
Lugg, Mrs. Robert.....2701 Military St., Port Huron
Martin, Mrs. Clyde.....3786 Gratiot Ave., Port Huron
McCoy, Mrs. Leslie F.....4673 Lake Shore Rd., Port Huron
Meredith, Mrs. E. W.....4380 Gratiot Ave., Port Huron
Mohney, Mrs. Glenn.....Gratiot Ave., Port Huron
Morris, Mrs. Alvin.....816 Sanborn St., Port Huron
Novak, Mrs. Walter.....2651 Military St., Port Huron
Patterson, Mrs. D. W.....4240 Keewahdin Dr., Port Huron
Rowe, Mrs. John.....3360 W. Water St., Port Huron
Schaefer, Mrs. W. A.....2551 Military St., Port Huron
Selby, Mrs. C. S.....1916 Military, Port Huron
Serniak, Mrs. John.....5014 Lakeshore Rd., Port Huron
Sites, Mrs. Edgar C.....2704 Military Ave., Port Huron
Tisdel, Mrs. James H.....2557 Military, Port Huron
Tomsu, Mrs. Glenn.....3180 Gratiot Ave., Port Huron
Townley, Mrs. Chas. O.....2815 Military, Port Huron
Treadgold, Mrs. Douglas....3205 Armour St., Port Huron
Ulmer, Mrs. Arthur H.....4476 Gratiot Ave., Port Huron
Van Rhee, Mrs. George....2317 Conger St., Port Huron
Walker, Mrs. Sidney....5090 Lakeshore Rd., Port Huron
Wass, Mrs. Henry C.....923 N. Riverside, St. Clair

ST. JOSEPH COUNTY

Berg, Mrs. L. A.....E. South St., Sturgis
Blood, Mrs. J. V.....617 S. Main Street, Three Rivers
Braham, Mrs. W. G.....105 N. Lakeview, Sturgis
Brunson, Mrs. A. E.....Mortimer St., Sturgis
Evans, Mrs. R. H.....105 S. Lakeview, Sturgis
Fiegel, Mrs. A. S.....500 Michigan Avenue, Sturgis
Fortner, Mrs. R. J.....137 Portage, Three Rivers
Jackobowitz, Mrs. J. W.....222 West St., Three Rivers
Lepard, Mrs. O. L.....606 E. Chicago Rd., Sturgis
O'Dell, Mrs. Chas.....E. Hoffman St., Three Rivers
O'Dell, Mrs. John.....721 Elm Ave., Three Rivers
Penzotti, Mrs. Stanley.....402 South Constantine, Three Rivers
Porter, Mrs. C. G.....196 E. Michigan, Three Rivers
Shaw, Mrs. G. D.....R.R. No. 2, Three Rivers
Sheldon, Mrs. John.....610 Cherry St., Sturgis
Smith, Mrs. R.D.....528 Jackson Rd., Colon
Weisheit, Mrs. Heinz.....200 Michigan, Sturgis
Zimont, Mrs. R. D.....435 White Pigeon Road, Constantine

SANILAC COUNTY

Blanchard, Mrs. Ernest Deckerville
Gift, Mrs. Weldon.....Marlette
Hart, Mrs. Robert K.....21 S. Howard Ave., Croswell
Jayson, Mrs. Michael.....Marlette
McCrea, Mrs. John.....Marlette
McGunegle, Mrs. K. T.....Sandusky
Muir, Mrs. Neil.....269 Howard Ave., Croswell
Seagar, Mrs. N. Cole.....Brown City
Smith, Mrs. Duane.....Brown City
Tweedie, Mrs. G. E.....Sandusky
Tweedie, Mrs. S. M.....Sandusky
Webster, Mrs. Clyde.....Marlette
Winfield, Mrs. Raymond.....Marlette

SHIAWASSEE COUNTY

Arnold, Mrs. A. L.....R.R. No. 1, Ovid
Austin, Mrs. Eugene.....635 N. Ball St., Owosso
Bach, Mrs. Norman F.....1201 N. Washington St., Owosso
Brenner, Mrs. Erwin.....500 East Oliver St., Owosso
Brown, Mrs. Richard C.....658 First St., Owosso
Brown, Mrs. R. J.....915 King St., Owosso
Chipman, Mrs. Elwood M.....502 W. Williams St., Owosso
Ford, Mrs. William.....1107 W. Oliver St., Owosso
Graves, Mrs. James.....221 E. Oliver St., Owosso
Green, Mrs. I. W.....515 N. Washington St., Owosso
Hoshal, Mrs. Verne L.....Durand
Hume, Mrs. H. A.....R.F.D. No. 6, Owosso
Janci, Mrs. Julius.....213 E. Mason St., Owosso
McKnight, Mrs. Edwin R.....220 N. Washington St., Owosso
Merz, Mrs. W. L.....1018 N. Washington St., Owosso
Pochert, Mrs. R. C.....1254 N. Shiawassee St., Owosso
Richards, Mrs. Chester.....Durand
Sahlmark, Mrs. Joseph.....203 N. Cedar St., Owosso
Slagh, Mrs. Earl N.....Elsie
Weinkauf, Mrs. William.....415 W. Mark St., Corunna
Weston, Mrs. Claude....1226 N. Washington St., Owosso

TUSCOLA COUNTY

Ballard, Mrs. James H.....Cass City
Dickerson, Mrs. W. W.....Caro
Donahue, Mrs. H. T.....Cass City
Elmendorf, Mrs. Edward.....Vassar
Fleet, Mrs. Richard.....Millington
Gilbert, Mrs. Donald.....Mayville
Gugino, Mrs. Frank.....Reese
Howlett, Mrs. R. R.....Caro
Miles, Mrs. Edward.....Caro
Morris, Mrs. F. L.....Cass City
Nigg, Mrs. H. L.....308 S. State St., Caro
Savage, Mrs. R. L.....Caro
Swanson, Mrs. E. C.....Vassar

VAN BUREN COUNTY

Boothby, Mrs. Carl F.....Hartford
Buckborough, Mrs. M. W.....Ainsworth Dr., South Haven
Cooper, Mrs. Joseph.....Bangor
Copeland, Mrs. Evan L.....W. Sherwood St., Decatur
Diephuis, Mrs. Bert.....42 Cass, South Haven
Dillon, Mrs. Thomas J.....8210 E. Michigan Rd., Paw Paw
Gano, Mrs. Avison.....38 E. Monroe, Bangor
Itzen, Mrs. J. F.....1023 Phoenix, South Haven
Kleber, Mrs. John A.....North Shore Drive, South Haven
Loomis, Mrs. F. J.....Paw Paw
Millard, Mrs. D. J.....Paw Paw
McFadden, Mrs. R. I.....Bloomingdale
Morgan, Mrs. Dale.....210 Michigan Ave., South Haven
Penoyar, Mrs. C. L.....South Haven
Spalding, Mrs. R. W.....Gobles

Staggs, Mrs. Adelbert L.....Hartford
Steele, Mrs. Arthur H.....Paw Paw
Ten Houten, Mrs. Charles.....Paw Paw
Terwilliger, Mrs. Edwin H.....216 Michigan Ave., South Haven
Urist, Mrs. Martin.....South Haven
Young, Mrs. William R.....Lawton

WASHTENAW COUNTY

Alford, Mrs. Barry.....14001 Beck Rd., Plymouth
Allen, Mrs. Arthur.....5 Harvard Place, Ann Arbor
Atchison, Mrs. Russell.....422 S. Rogers, Northville
Banghart, Mrs. Norman....1250 Ferdon Rd., Ann Arbor
Barlow, Mrs. R. Craig....1305 Arbor View, Ann Arbor
Barr, Mrs. A. S.....2701 Brockman Blvd., Ann Arbor
Bassow, Mrs. Paul.....2220 Washtenaw Ave., Ann Arbor
Bauer, Mrs. Gerhard.....1612 Granger, Ann Arbor
Baum, Mrs. William.....15 Harvard Pl., Ann Arbor
Bebin, Mrs. Hose.....1005 Cornwall Pl., Ann Arbor
Beckett, Mrs. Morley.....2135 Washtenaw, Ann Arbor
Beierwaltes, Mrs. Wm.....1204 Bydding Rd., Ann Arbor
Belote, Mrs. G. H.....1710 Morton, Ann Arbor
Belser, Mrs. Walter.....2101 Woodside Rd., Ann Arbor
Bethell, Mrs. Frank.....409 Lenawee Dr., Ann Arbor
Bobbitt, Mrs. D. E.....2580 Elmwood, East Ann Arbor
Bosch, Mrs. J. K.....Thorn Apple Lane, Northville
Botch, Mrs. E. S.....906 Spring St., Ann Arbor
Breiner, Mrs. Sander.....Ypsilanti State Hosp., Ypsilanti
Brown, Mrs. William.....1517 Granger, Ann Arbor
Campbell, Mrs. Darell....1701 Shadford Rd., Ann Arbor
Carron, Mrs. D. P.....1707 Harding Rd., Ann Arbor
Clyde, Mrs. Ensign.....1298 Sheridan, Plymouth
Coller, Mrs. Frederick..2105 Wallingford Rd., Ann Arbor
Crook, Mrs. Clarence..2112 Wallingford Rd., Ann Arbor
Cummings, Mrs. H. H.....1020 Ferdon Rd., Ann Arbor
Curtis, Mrs. Arthur....2905 Brockman Blvd., Ann Arbor
Davenport, Mrs. F. M.....1308 Martin Place, Ann Arbor
DeJong, Mrs. R. N.....1526 Harding Rd., Ann Arbor
Denton, Mrs. Cleveland.....731 Tappan, Ann Arbor
DeTar, Mrs. J. S.....55 W. Main St., Milan
DeWeese, Mrs. M.....20 Heatheridge, Ann Arbor
Dingman, Mrs. Reed O.....1407 Lincoln Ave., Ann Arbor
Dolfin, Mrs. W. E.....2107 Devonshire Rd., Ann Arbor
Doorn, Mrs. Henry.....1110 Miner, Ann Arbor
Dryer, Mrs. C. K.....3033 Sophia, Wayne
Dukay, Mrs. Alexander....Ypsilanti State Hosp., Ypsilanti
Edmunds, Mrs. William.....6395 Rossback, Ypsilanti
Engleke, Mrs. Otto.....810 Hutchins Ave., Ann Arbor
English, Mrs. David.....1699 Broadway, Ann Arbor
Evans, Mrs. T. N.....707 Henry, Ann Arbor
Falk, Mrs. E. Carl.....212 S. Huron, Ann Arbor
Falls, Mrs. Harold.....1525 Harding Rd., Ann Arbor
Feller, Mrs. Irving.....1213 Prospect, Ann Arbor
Fink, Mrs. George.....411 Linda Vista, Ann Arbor
Fisher, Mrs. Joseph.....415 Washington, Chelsea
Fralick, Mrs. Bruce.....2101 Belmont, Ann Arbor
French, Mrs. A. John.....409 Mark Hannah, Ann Arbor
Frost, Mrs. Lyle.....309 N. Washington, Ypsilanti
Frye, Mrs. Carl.....2025 Hill, Ann Arbor
Furstenberg, Mrs. A. C.....2240 Belmont, Ann Arbor
Ganzhorn, Mrs. E. C.....2705 Whitmore Lake Rd., Ann Arbor
Garland, Mrs. Joseph.....6 Marshall Ct., Ann Arbor
Getting, Mrs. Vlade.....1200 Arlington, Ann Arbor
Gotz, Mrs. Alexander.....709 Sunset, Ann Arbor
Gould, Mrs. Stewart.....2309 Yost, Ann Arbor
Grawn, Mrs. Frank.....604 Pearl, Ypsilanti
Hagerman, Mrs. G. W.....2124 Tuomy Rd., Ann Arbor
Haight, Mrs. Cameron.....2112 Vinewood, Ann Arbor
Hammond, Mrs. Walter W., Jr.....302 Sunset St., Plymouth
Handorf, Mrs. H.....300 Wing Court, Northville
Harrell, Mrs. R.....2112 Copley, Ann Arbor
Harris, Mrs. Bradley.....206 S. Washington, Ypsilanti
Harris, Mrs. Scott.....1144 Roosevelt Blvd., Ypsilanti
Henderson, Mrs. John....2113 Devonshire Rd., Ann Arbor
Hicks, Mrs. Richard.....Ypsilanti State Hosp., Ypsilanti
Hildebrant, Mrs. H. Mark.....1223 Morningside Dr., Ann Arbor
Hill, Mrs. B. J.....2846 Whitewood, Ann Arbor
Himler, Mrs. Leonard E.....1225 Fair Oaks Parkway, Ann Arbor
Hodges, Mrs. F. J.....1420 Cambridge Rd., Ann Arbor
Holt, Mrs. John.....250 Orchard Hills Dr., Ann Arbor
Hopp, Mrs. Ralph.....2001 Pontiac, Ann Arbor
House, Mrs. F. B.....1240 Crosby Crescent, Ann Arbor
Howard, Mrs. S. C.....2009 Devonshire, Ann Arbor
Hulett, Mrs. Ralph.....2007 Miller Rd., Ann Arbor
Johnson, Mrs. Franklin....1761 Westridge Rd., Ann Arbor
Kabza, Mrs. Theodore.....2310 Fernwood, Ann Arbor
Kambly, Mrs. A. H.....1602 Leaird, Ann Arbor
Kemper, Mrs. John.....320 Juniper Lane, Barton Hills, Ann Arbor
Kern, Mrs. Wheeler.....24801 Fairmount Dr., Dearborn
Kivi, Mrs. Louis.....540 Burwood, Ann Arbor
Kretzschmar, Mrs. Norman R...Couzens Hall, Ann Arbor
LaFever, Mrs. S. L.....2121 Melrose, Ann Arbor
Law, Mrs. John.....1706 Cambridge Rd., Ann Arbor
Linman, Mrs. James.....1121 Bydding Rd., Ann Arbor
Lowry, Mrs. Claude..2106 Arbor View Blvd., Ann Arbor
Magielski, Mrs. John E.....404 Westwood, Ann Arbor
Mallery, Mrs. Tod.....Ann Arbor
Marshall, Mrs. Mark.....918 S. Forest Ave., Ann Arbor
Martin, Mrs. D. W.....212 N. Mansfield, Ypsilanti
Mason, Mrs. S.....Box A, Ypsilanti State Hosp., Ypsilanti
Maxwell, Mrs. J. H.....2139 Melrose Ave., Ann Arbor
McWilliams, Mrs. J. R.....2402 Brockman, Ann Arbor
Milford, Mrs. A. F.....1203 Whittier Road, Ypsilanti
Moore, Mrs. Kenneth.....Ypsilanti State Hosp., Ypsilanti
Mori, Mrs. Paul.....1301 Prescott, Ann Arbor
Muehlig, Mrs. G. F.....1520 White St., Ann Arbor
Newlander, Mrs. Willet....417 S. Seventh St., Ann Arbor
Newton, Mrs. C W.....2120 Wallingford, Ann Arbor
Obenauf, Mrs. Walter....Ypsilanti State Hosp., Ypsilanti
O'Connor, Mrs. Sylvester.....1660 Arlington, Ann Arbor
Parnall, Mrs. Christopher.....510 Onondaga, Ann Arbor
Payne, Mrs. Beverly....245 Orchard Hills Dr., Ann Arbor
Place, Mrs. Edwin.....2616 Hawthorne Rd., Ann Arbor
Pitts, Mrs. Kenneth.....1446 University Terrace, Ann Arbor
Pollard, Mrs. H. M.....2012 Vinewood, Ann Arbor
Rae, Mrs. James W.....580 Rock Creek Dr., Ann Arbor
Ratliff, Mrs. R. K.....231 Corrie Rd., Barton Hills, Ann Arbor
Rehner, Mrs. Robert.....1506 Geddes Ave., Ann Arbor
Reichert, Mrs. R. E.....3516 Edgewood, Ann Arbor
Rekshan, Mrs. Walter.....1562 McLain, Allen Park
Riecker, Mrs. Herman..2109 Wallingford Rd., Ann Arbor
Riggs, Mrs. Harold.....2119 Devonshire Rd., Ann Arbor
Robinson, Mrs. Wm. D.....1810 Cayuga, Ann Arbor
Ross, Mrs. Howard....180 Underdown Rd., Barton Hills, Ann Arbor
Saunders, Mrs. Allen.....1008 Pauline, Ann Arbor
Sayre, Mrs. George.....1208 Whittier Blvd., Ypsilanti
Schneider, Mrs. Richard C.....1101 Pauline, Ann Arbor
Schoch, Mrs. Henry.....808 Princeton, Ann Arbor
Schumacher, Mrs. W. E.....1475 Stein Rd., Ann Arbor
Scovill, Mrs. Henry.....1313 W. Cross St., Ypsilanti
Seevers, Mrs. M. H.....620 Oxford Rd., Ann Arbor
Sheldon, Mrs. John.....2121 Tuomy Road, Ann Arbor
Sink, Mrs. Emory.....1546 Packard St., Ann Arbor
Spears, Mrs. Clarence.....1307 Pearl, Ypsilanti
Spencer, Mrs. Harvey.....2305 Vinewood, Ann Arbor
Struthers, Mrs. J. N. P.....Box A, 3501 Willes Rd., Ypsilanti
Sturgis, Mrs. C. C.....609 Stratford Dr., Ann Arbor
Taylor, Mrs. William.....1244 Ferdon St., Ann Arbor
Thieme, Mrs. E. T.....3 Geddes Heights, Ann Arbor
Towsley, Mrs. Harry A.....1000 Berkshire Rd., Ann Arbor

Tupper, Mrs. C. John.....2657 Whitewood, Ann Arbor
Von Ahn, Mrs. Harold.....408 Thompson, Ann Arbor
Waggoner, Mrs. R. W.....3333 Geddes Rd., Ann Arbor
Weisman, Mrs. Raoul.....1408 Wells St., Ann Arbor
Wenner, Mrs. William.....1228 Clague, Ann Arbor
Westover, Mrs. Charles.....1405 Maple, Plymouth
Wicht, Mrs. P. J.....1386 W. Michigan Ave., Ypsilanti
Williams, Mrs. H. R.....1508 Granger Ave., Ann Arbor
Williamson, Mrs. F. B.....922 Pleasant Ave., Ypsilanti
Wilson, Mrs. James.....1801 Hermitage Rd., Ann Arbor
Wolfman, Mrs. Earl.....827 Bruce St., Ann Arbor
Woods, Mrs. J. J.....1900 Washtenaw, Ypsilanti
Wylie, Mrs. W. C.....3219 B. St., Dexter
Zerbi, Mrs. Victor M.....315 N. Adams, Ypsilanti

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Adams, Mrs. James R.....751 Morley Court, Dearborn
Adams, Mrs. Vincent B.....18437 Pelkey, Detroit
Akroyd, Mrs. C. A.....19635 Shrewsbury, Detroit
Albrecht, Mrs. Albert J.....11624 Wisconsin, Detroit
Albrecht, Mrs. Herman F.....877 Chicago Blvd., Detroit
Alexander, Mrs. Eugene J.....24140 Wilson, Dearborn
Allard, Mrs. Andrew J.....4350 Haverhill, Detroit
Amos, Mrs. T. Grover.....2708 Woodstock Dr., Detroit
Anderson, Mrs. James.....7715 Middlepointe, Dearborn
Andries, Mrs. Geo. H.....17365 Muirland Ave., Detroit
Arehart, Mrs. Burke.....534 Roslyn Rd., Grosse Pointe
Arminski, Mrs. Thomas C.....16874 Muirland, Detroit
Ashe, Mrs. Stilson R.....12 Byfield Lane, Dearborn
Ashley, Mrs. L. Byron.....18050 Fairway Dr., Detroit
Asselin, Mrs. Dean.....151 Lewiston, Grosse Pointe
August, Mrs. Harry E.....26081 Hendrie Blvd., Huntington Woods
Auld, Mrs. Douglas.....7838 Bingham, Dearborn
Avrin, Mrs. Ira.....19140 Wisconsin, Detroit
Axelson, Mrs. A. U.....17390 Fairway Dr., Detroit

Babcock, Mrs. Lloyd K.....13901 Ashbury Park, Detroit
Babcock, Mrs. W. W.....18254 Oak Dr., Detroit
Bagley, Mrs. Harry E.....7541 Oakman Blvd., Dearborn
Bailey, Mrs. C. C.....12824 Broadstreet Ave., Detroit
Bailey, Mrs. Louis J.....620 Vinewood, Birmingham
Barber, Mrs. Ray.....990 S. Harvey, Plymouth
Barone, Mrs. Charles J.....51 Eason Ave., Highland Park
Barone, Mrs. C. Gerald.....1851 Crosswick, Birmingham
Barnett, Mrs. Louis L...8 Millington Rd., Pleasant Ridge
Barrett, Mrs. John L.....21721 Gaukler, St. Clair Shores
Barrett, Mrs. Wyman D.....91 Touraine Rd., Grosse Pointe Farms
Barron, Mrs. James.....2535 Amberly Rd., Birmingham
Bates, Mrs. W. M.....2587 W. Grand Blvd., Detroit
Bauer, Mrs. Lester E.....1317 Bishop Rd., Grosse Pointe
Baumgarten, Mrs. E. C.....1062 Lochmoor, Grosse Pointe
Beach, Mrs. Watson.....281 Kenwood Court, Grosse Pointe Farms
Beamer, Mrs. Geo.....15834 Longmeadow Ave., Dearborn
Bedwell, Mrs. William L.....116 Kerby Rd., Grosse Pointe
Beeuwkes, Mrs. Lambertus E.....13014 Mackenzie, Detroit
Behan, Mrs. Robert C...1353 Balfour, Grosse Pointe Park
Bell, Mrs. J. Kenner.....49 Rhode Island Ave., Highland Park
Bentley, Mrs. Neil.....1160 Chicago Blvd., Detroit
Berlien, Mrs. Ivan C.....2906 E. Jefferson, Detroit
Best, Mrs. Edward....1229 Three Mile Dr., Grosse Pointe
Bethea, Mrs. Hardee.....279 Kenwood Court, Grosse Pointe Farms
Bicknell, Mrs. Edgar A.....13225 Birwood Ave., Detroit
Bielawski, Mrs. John G.....8124 East Morrow Circle, Detroit
Birch, Mrs. John R.....161 Vendome, Grosse Pointe
Bittrick, Mrs. Norman.....7474 LaSalle Blvd., Detroit
Birkhill, Mrs. Frederick Ross....19510 Roslyn Rd., Detroit
Blain, Mrs. Alexander..1028 Berkshire Rd., Grosse Pointe
Block, Mrs. Duane.....13930 Abington, Detroit
Blodgett, Mrs. William H...535 Overhill Rd., Birmingham
Bogue, Mrs. Robert E.....19161 Lancashire, Detroit
Boileau, Mrs. Thornton I.....460 Hamilton Rd., Birmingham
Bolstad, Mrs. Donald.....2258 S. Silvery Lane, Dearborn
Boutrous, Mrs. Thomas A.....18508 Sorrento, Detroit
Bowers, Mrs. Leo J.....47 Cambridge, Pleasant Ridge
Boyd, Mrs. Eugene J.....24163 Penn, Dearborn
Brabaglia, Mrs. Louis..1308 Hampton Rd., Grosse Pointe
Bracken, Mrs. Andrew H...7540 Oakman Blvd., Dearborn
Braley, Mrs. William N.....19300 Riverside Dr., Birmingham
Briggs, Mrs. William.....4121 Harvard Rd., Detroit
Brines, Mrs. Osborne A.....1415 Parker Ave., Apt. 266, Detroit
Bringard, Mrs. Elmer.....18110 Fairfield Ave., Detroit
Bristol, Mrs. Wm. R.....6142 Bishop Rd., Detroit
Bronson, Mrs. Wm. W.....845 Lone Pine Rd., Bloomfield Hills
Brooks, Mrs. Clark D.....17196 Fairway Dr., Detroit
Brosius, Mrs. William L.....16150 Sorrento, Detroit
Brough, Mrs. Glen A.....25519 Meridian Rd., Grosse Ile
Brown, Mrs. A. G.....13991 Asbury Park, Detroit
Brown, Mrs. Audrey O.....46 Oakdale Blvd., Pleasant Ridge
Brown, Mrs. Carlton.....16552 Westmoreland, Detroit
Brown, Mrs. Gordon T.....8355 E. Outer Dr.. Detroit
Brush, Mrs. Brock E.....22313 Cherryhill, Dearborn
Bryan, Mrs. John B.....2181 Sunnyknoll, Berkley
Budd, Mrs. Alexander S.....440 Lake Park Dr., Birmingham
Buerki, Mrs. Robin.....201 Lake Shore, Grosse Pointe
Buesser, Mrs. Frederick G.....8100 E. Jefferson Ave., Detroit
Burke, Mrs. Ralph M.....580 University Place, Grosse Pointe
Burnham, Mrs. David C.....16167 Glastonbury Rd., Detroit
Burns, Mrs. Robert T.....4610 Somerset, Detroit
Burr, Mrs. George.....2016 Boston W., Detroit
Burroughs, Mrs. R. G.....31624 Auburn Dr., Birmingham

Caldwell, Mrs. John R.....9580 Hemingway, Detroit
Calkins, Mrs. H. Neill.....15302 Gilchrist, Detroit
Callaghan, Mrs. Thos. T.....201 E. Kirby, Detroit
Callery, Mrs. A. L.....5959 Bishop Rd., Detroit
Cameron, Mrs. Duncan A.....15454 Ashton Rd., Detroit
Campbell, Mrs. Mac D.....3 Sylvan Rd., Pleasant Ridge
Campbell, Mrs. Robert E...943 Fisher Rd., Grosse Pointe
Candler, Mrs. Clarence L.....1690 Faircourt, Grosse Pointe Woods
Capano, Mrs. O. A.....26415 Meadowbrook Way, Birmingham
Caputo, Mrs. Joseph M.....22575 Nona, Dearborn
Carnes, Mrs. Harry E.....652 Lincoln Rd., Grosse Pointe
Carpenter, Mrs. Claire H...18701 Snowden Ave., Detroit
Carrick, Mrs. Lee.....506 Lakeshore Lane, Grosse Pointe Woods
Carter, Mrs. John M.....18900 Fairway Dr., Detroit
Carter, Mrs. Leland F.....750 Middlesex Rd., Grosse Pointe
Caughey, Mrs. Andrew F., Jr.....8911 Marygrove Dr., Detroit
Chall, Mrs. Henry G.....2941 W. McNichols, Detroit
Chance, Mrs. Jos. H.....12731 Dartmouth, Oak Park
Chapin, Mrs. Sidney.....425 Golfcrest, Dearborn
Charleston, Mrs. R. A.....17256 Pierson, Detroit
Chester, Mrs. William P.....2916 Seminole, Detroit
Chipman, Mrs. Willard A.....14613 Rutland Rd., Detroit
Chittenden, Mrs. George.....16734 Glastonbury, Detroit
Christensen, Mrs. C. A.....7876 Hartwell Ave., Dearborn
Christopher, Mrs. James G.....9515 Outer Dr., Detroit
Chrouch, Mrs. L. A.....16215 Sunderland, Detroit
Clark, Mrs. Arthur M.....318 Beechmont, Dearborn
Clark, Mrs. Harold E.....10064 Ludlow Ave., Huntington Woods

Clarke, Mrs. Robert B...385 University Pl., Grosse Pointe
Clifford, Mrs. T. P.....4355 Glendale Ave., Detroit
Cochrane, Mrs. Edgar.....13974 Archdale Rd., Detroit
Cole, Mrs. James E.....14310 Asbury Park, Detroit
Colvin, Mrs. Leslie T.....18470 Scarsdale, Detroit
Connolly, Mrs. Paul J.....16778 Westmoreland Ave., Detroit
Connelly, Mrs. Richard C.....1360 Three Mile Dr., Grosse Pointe
Cook, Mrs. James C.....5 Fairmount Ct., Dearborn
Cooksey, Mrs. Warren B.....19510 Stratford Dr., Detroit
Cooper, Mrs. Benjamin F...1124 Berkshire, Grosse Pointe
Cooper, Mrs. Edmond L.....914 Shirley, Birmingham
Cooper, Mrs. Richard F.....23130 Wilson, Dearborn
Corbett, Mrs. John J.....57 Merriweather Ave., Grosse Pointe Farms
Corbett, Mrs. John V...22924 Edgewood, St. Clair Shores
Coseglia, Mrs. R. P.....1359 Berkshire, Grosse Pointe
Costello, Mrs. Russell T.....2850 Pine Lake Dr., Rt. 3, Pontiac
Courville, Mrs. Chas. J.....19719 Whitcomb, Detroit
Croll, Mrs. Maurice.....19181 Appoline, Detroit
Crook, Mrs. Charles L.....60 Colorado, Highland Park
Croushore, Mrs. J. E.....1185 Westward, Birmingham
Cushing, Mrs. R. G.....643 Lochmoor, Grosse Pointe
Cusick, Mrs. Paul L.....17575 Oak Dr., Detroit

Danforth, Mrs. R. D.....1960 Oxford, Grosse Pointe
Darling, Mrs. Chas. E.....14401 Glastonbury Rd., Detroit
Darling, Mrs. Milton A.....8100 LaSalle Blvd., Detroit
Darnley, Mrs. J. D.....24 Fairwood, Pleasant Ridge
Davies, Mrs. Windsor.....1013 Audubon, Grosse Pointe
Dawson, Mrs. Wirt A.....304 Ave. B. S. E., Winterhaven, Fla.
Day, Mrs. Francis.....3851 Harvard, Detroit
DeGiustino, Mrs. Caesar....1436 Berkshire, Grosse Pointe
DeFever, Mrs. Cyril R.....1113 Kensington Rd., Grosse Pointe
DeJongh, Mrs. Edwin.....3880 W. Lincoln, Birmingham
DeNike, Mrs. A. James.....2906 E. Jefferson, Detroit
Dennis, Mrs. M. S.....22362 Morley Ave., Dearborn
Derleth, Mrs. Paul E.....563 W. Oakridge, Ferndale
DeSpelder, Mrs. R. E.....1452 Yorkshire, Grosse Pointe
Deuby, Mrs. Owen J.....19200 Coyle, Detroit
Devine, Mrs. Herbert W.....1315 Harvard, Grosse Pointe
Diekman, Mrs. Fred C.....19701 Burt Rd., Detroit
Dill, Mrs. J. Lewis.....18615 Birchcrest Ave., Detroit
Dimond, Mrs. George C.....6853 Orchard, Dearborn
Ditzler, Mrs. John W.....490 St. Clair, Grosse Pointe
Dixon, Mrs. Robert K.....201 East Kirby Ave., Detroit
Doering, Mrs. Wendell R.....27489 Lathrup, Birmingham
Dolega, Mrs. Stanley F.....366 Moross, Grosse Pointe
Dolgoff, Mrs. Sidney.....9855 Melbourne, Allen Park
Domzalski, Mrs. Henry M.....23754 Roxana, East Detroit
Donald, Mrs. Douglas.....8120 E. Jefferson, Detroit
Dorsey, Mrs. John M.....65 Moss, Highland Park
Doub, Mrs. Howard P.....18234 Wildemere Ave., Detroit
Downer, Mrs. Ira G.....435 Lodge Dr., Detroit
Draves, Mrs. Edward F.....14541 Grandmont, Detroit
Dubin, Mrs. Joseph J.....1420 Strathcona, Detroit
Dubois, Mrs. P. W.....630 Merrick Ave., Detroit
Dudek, Mrs. John J.....17166 Parkside Ave., Detroit
Dumke, Mrs. Paul R.....544 Middlesex Blvd., Grosse Pointe
Dundas, Mrs. Edward.....1235 Beechmont, Dearborn
Dunlap, Mrs. Henry.....505 Lake Point, Grosse Pointe
Dunn, Mrs. Cornelius E.....3496 Burns Ave., Detroit
Dupler, Mrs. Gerald.....1126 Mayburn, Dearborn
Durham, Mrs. Everett W.....844 N. Highland, Dearborn
Dutcher, Mrs. Dwight J...21742 Newcastle, Grosse Pointe
Duwe, Mrs. Frank A.....15425 Manor, Detroit
Dziuba, Mrs. John.....17230 Bentler, Detroit

Ebner, Mrs. C. M.....22925 Colony Rd., St. Clair Shores
Eldredge, Mrs. Edward F.....1156 Harvard, Grosse Pointe
Elvidge, Mrs. R. J.....18031 Hamilton, Detroit
Ensign, Mrs. Dwight C.....Franklin
Erman, Mrs. Joseph M.....19530 Stratford, Detroit
Eschbach, Mrs. Joseph W.....410 River Lane, Dearborn
Evans, Mrs. Joseph M.....12862 E. Outer Drive, Detroit
Ewing, Mrs. C. H.....526 University Place, Grosse Pointe
Eyler, Mrs. William R.....18347 Bedford Rd., Birmingham

Fallis, Mrs. L. S.....2474 Chicago Blvd., Detroit
Felcyn, Mrs. W. G.....2091 W. Grand Blvd., Detroit
Fellers, Mrs. R. L.....4984 Ridgewood Ave., Detroit
Fenton, Mrs. Edwin.....14831 Warwick Rd., Detroit
Fenton, Mrs. Russell.....18469 Hillcrest Blvd., Birmingham
Fenton, Mrs. Stanley C.....5092 Yorkshire Ave., Detroit
Fentress, Mrs. Vance.....96 Martin Place, Detroit
Ferris, Mrs. Geo. N.....16745 Oakfield, Detroit
Figiel, Mrs. Leo.....1940 Hawthorne, Dearborn
Figiel, Mrs. Steven J.....6648 Oakman Blvd., Dearborn
Fisher, Mrs. C. L.....791 University Place, Grosse Pointe
Fisher, Mrs. George S.....1101 Whittier, Grosse Pointe
Fisher, Mrs. James M.....754 Rivard Blvd., Grosse Pointe
Fitzgerald, Mrs. J. M.....16838 Huntington Rd., Detroit
Flaherty, Mrs. H. F.....17404 Birchcrest, Detroit
Flaherty, Mrs. Norman W.....24315 Fairmount Dr., Dearborn
Flaherty, Mrs. Samuel A.....14065 Warnick Rd., Detroit
Fleming, Mrs. Joseph L.....7360 LaSalle Blvd., Detroit
Flora, Mrs. William R.....589 Pemberton, Grosse Pointe
Fogt, Mrs. Robert G.....720 Hidden Lane, Grosse Pointe
Font, Mrs. Anthony J.....16854 Muirland, Detroit
Ford, Mrs. G. A.....18934 Fairfield Ave., Detroit
Ford, Mrs. Sylvester.....20170 Lichfield Rd., Detroit
Fordell, Mrs. Frank.....441 S. Oakwood Blvd, Detroit
Foster, Mrs. Wm. L.....15316 Piedmont, Detroit
France, Mrs. C. Jackson.....3401 Burns, Detroit
Franjac, Mrs. Marion.....37355 W. 8 Mile Rd., Livonia
Frederickson, Mrs. George C.....1450 Oxford Rd., Grosse Pointe
Freitas, Mrs. Eugene L.....19914 Fairway, Grosse Pointe Woods
Frey, Mrs. James L.....17144 Westmoreland, Detroit
Fritz, Mrs. George.....80 Lochmoor Blvd., Grosse Pointe
Fryfogle, Mrs. James....17399 Edinborough Rd., Detroit

Gajewski, Mrs. John E.....1320 Grayton, Grosse Pointe
Ganschow, Mrs. J. H...10025 Nadine, Huntington Woods
Gardner, Mrs. Max L...17011 E. Jefferson, Grosse Pointe
Gaston, Mrs. Herbert B.....7501 W. Morrow Circle, Dearborn
Gehring, Mrs. Harold..17607 Magnolia Parkway, Detroit
Geib, Mrs. L. O.....1411 Berkshire, Grosse Pointe Park
Gerisch, Mrs. Robert.....19441 Bretton Dr., Detroit
Gerondale, Mrs. E. J.....15000 Dexter Blvd., Detroit
Gigante, Mrs. Nicola.....1728 Seminole, Detroit
Gillespie, Mrs. Stephen M.....1638 DaCosta, Dearborn
Gittins, Mrs. Perry.....20210 Renfrew Rd., Detroit
Glowacki, Mrs. Ben F.....840 Jonathan Lane, Bloomfield Hills
Gordon, Mrs. J. Whitlock.....12700 Mendota, Detroit
Gottlieb, Mrs. Jacques S.....1073 Stratford Lane, Bloomfield Hills
Gottschalk, Mrs. F. W.....1000 Whitmore Rd., Apt. 15, Detroit
Gourley, Mrs. E. V.....27426 Morningside Plaza, Birmingham
Goux, Mrs. Raymond S.....17566 Muirland Ave., Detroit
Grace, Mrs. Joseph M.....17505 Parkside, Detroit
Grady, Mrs. Joseph A.....14246 Riverview, Detroit
Grain, Mrs. Gerald O.....17556 Oak Dr., Detroit
Granger, Mrs. George R.....88 Renaud Rd., Grosse Pointe
Gravelle, Mrs. L. J.....1156 Yorkshire Rd., Grosse Pointe Park
Gray, Mrs. Jacques P.....8900 E. Jefferson, #913, Detroit
Green, Mrs. Edward W.....30024 Champine Dr., St. Clair Shores
Green, Mrs. Louis M.....1230 N. Oxford Rd., Grosse Pointe
Green, Mrs. Nelson.....107 Elm Park, Pleasant Ridge
Greenlea, Mrs. W. T.....15239 Cedargrove, Detroit
Griffin, Mrs. Robert J.....20227 Lancaster, Grosse Pointe
Grossman, Mrs. Sol C.....20015 Shrewsbury, Detroit
Guerrero, Mrs. J.....4285 Glendale, Detroit

Gurdjian, Mrs. E. S.....19385 Renfrew Rd., Detroit
Guyton, Mrs. Jack S.....402 University Pl., Grosse Pointe
Hall, Mrs. E. Walter.....19210 Bretton Dr., Detroit
Hall, Mrs. Winthrop.....6 Cherry Hill Court, Dearborn
Hallen, Mrs. L. James.....14032 Ohio, Detroit
Haitinger, Mrs. Kalman S.....844 Whittier, Grosse Pointe
Hamil, Mrs. Brenton M.....12 Adams Lane, Dearborn
Hamilton, Mrs. Quentin P.....16287 Mendota, Detroit
Hammer, Mrs. Roy W.....17340 Runyon, Detroit
Hansen, Mrs. Frederick E.....120 Glynn Court, Apt. 700, Detroit
Harley, Mrs. Louis M.....17325 Fairfield, Detroit
Harm, Mrs. W. B.....16260 Cherrylawn Ave., Detroit
Harrington, Mrs. Frank L.....16821 Stout, Detroit
Harris, Mrs. Harold H.....7350 Oakman, Dearborn
Harris, Mrs. Ivor D.....1005 Berkshire, Grosse Pointe
Hartman, Mrs. Frank W.....7661 LaSalle Blvd., Detroit
Hasley, Mrs. Clyde K.....2320 N. LaSalle Gardens, Detroit
Hassig, Mrs. Walter W.....443 Maison, Grosse Pointe
Hastings, Mrs. Orville J.....10427 E. Outer Dr., Detroit
Hauser, Mrs. I. Jerome.....1980 Strathcona Dr., Detroit
Hauser, Mrs. John E.....18243 Birchcrest, Detroit
Havers, Mrs. Howard.....271 Kenwood Court, Grosse Pointe
Hawkins, Mrs. Jas. W.....14180 Woodmont, Detroit
Hayes, Mrs. Dean M.....4342 Bishop, Detroit
Hazen, Mrs. Roy S.....15371 Stout, Detroit
Heideman, Mrs. Louis.....18010 Roselawn, Detroit
Heidt, Mrs. Richard F.....18491 Ardmore, Detroit
Henderson, Mrs. Leslie T.....832 N. Renaud, Grosse Pointe
Herbst, Mrs. Harold B.....20482 Ardmore, Detroit
Herwick, Mrs. John T.....18731 Glenwood, Birmingham
Hess, Mrs. Murray W.....23860 Seneca, Oak Park
Heyner, Mrs. S. A.....3424 Oakman Blvd., Detroit
Hickey, Mrs. Joseph.....24346 Fairmount Dr., Dearborn
Hicks, Mrs. Frederick G.....1000 Westwood, Birmingham
Hillenbrand, Mrs. Alfred E.....675 Fisher Rd., Grosse Pointe
Hoagland, Mrs. Thomas V.....630 W. Hildale, Detroit
Hodges, Mrs. Frank J.....7407 Oakman Blvd., Dearborn
Hodges, Mrs. Jason.....1200 S. Oxford Rd., Grosse Pointe Woods
Hodgkinson, Mrs. Paul C.....17546 Meadowwood, Birmingham
Hoffman, Mrs. Edwin S.....14877 Warwick, Detroit
Holt, Mrs. Charles.....8525 Ward, Detroit
Howard, Mrs. Austin Z.....15492 Ashton Rd., Detroit
Howell, Mrs. James T.....27907 E. California Dr., Birmingham
Howes, Mrs. Homer A.....9322 Artesian, Detroit
Howlett, Mrs. Howard T.....20026 Shrewsbury, Detroit
Hranchook, Mrs. Michael.....5042 Haverhill, Detroit
H'Romadko, Mrs. Louis.....Martel Dr., Bloomfield Hills
Huber, Mrs. Philip.....1724 Bassett, Royal Oak
Hudson, Mrs. William A.....2290 Edison, Detroit
Hulick, Mrs. Archie.....15525 Amherst, Birmingham
Hull, Mrs. LeRoy W.....20115 Canterbury, Detroit
Hume, Mrs. H. Ross.....1906 Country Club Dr., Grosse Pointe
Huminski, Mrs. T. S.....1232 Devonshire, Grosse Pointe Park
Hummel, Mrs. A. R...1020 Three Mile Dr., Grosse Pointe
Hunt, Mrs. Theodore H.....10095 E. Outer Dr., Detroit
Hurd, Mrs. Brooks H.....20187 Schaefer Rd., Detroit
Husband, Mrs. Chas. W.....19450 Argyle Crescent, Detroit
Husband, Mrs. Raymond.....18715 Prairie, Detroit
Hutchins, Mrs. M. Colton.....23009 Kipling, Oak Park
Hyde, Mrs. F. W., Jr.....14255 Faust, Detroit
Iacobell, Mrs. Peter H.....8080 E. Lantz, Detroit
Igna, Mrs. E. J.....16924 St. Paul, Grosse Pointe
Insley, Mrs. Stanley W.....12880 Archdale Ave., Detroit
Irvin, Mrs. Earle.....1343 Buckingham Rd., Grosse Pointe
Irwin, Mrs. William A.....2130 Iroquois, Detroit
Jacobson, Mrs. Lyle F.....14123 Riverview, Detroit
Jaekel, Mrs. C. N.....443 Lexington Ave., Grosse Pointe Farms
Jaffar, Mrs. Donald J.....630 Merrick, Detroit
Jahsman, Mrs. William E.....Box 131, Franklin
Jarvis, Mrs. Harold F.....14066 Linnhurst, Detroit
Jaynes, Mrs. Richard V.....14871 Heyden, Detroit
Jeffries, Mrs. Benjamin.....1010 Harvard Place, Grosse Pointe
Jend, Mrs. William, Jr.....7027 Riverside Dr., Dearborn
Jenkins, Mrs. Elwood.....3439 Seminole, Detroit
Jensen, Mrs. V. W.....8230 Littlefield, Detroit
Jennings, Mrs. F. R.....425 Chalfonte, Grosse Pointe
Jodar, Mrs. Loyal W...21741 Edmunton, St. Clair Shores
John, Mrs. Hubert R.....331 Oakland Park Blvd., Pleasant Ridge
Johnson, Mrs. Ralph A.....2115 Iroquois Ave., Detroit
Johnson, Mrs. Thomas D.....16800 Stout, Detroit
Johnson, Mrs. Vernon P.....502 Pemberton, Grosse Pointe
Johnson, Mrs. Vincent.....345 Lodge Dr., Detroit
Johnston, Mrs. William E.....Lee Plaza, 2240 W. Grand Blvd., Detroit
Joinville, Mrs. E. V...3879 Riverside Dr., Windsor, Ont.
Jones, Mrs. Roy D.....7747 West Seven Mile Rd., Detroit
Joyce, Mrs. Stanley J.....2040 W. McNichols, Detroit
Kalder, Mrs. Ned.....18270 Kirkshire, Birmingham
Kamsler, Mrs. Milton A.....9040 Tecumseh, Detroit
Kasper, Mrs. Joseph A.....1428 Buckingham Rd., Grosse Pointe
Kaump, Mrs. D. H.....16020 Warwick, Detroit
Kauppinen, Mrs. J. A.....16845 Gilchrist, Detroit
Keane, Mrs. William E.....1007 Harvard Rd., Grosse Pointe
Kehoe, Mrs. Henry J.....91 Renaud Rd., Grosse Pointe Farms
Keim, Mrs. Harther L.....369 University Place, Grosse Pointe
Keith, Mrs. Kelly.....27460 E. California Dr., Birmingham
Kelley, Mrs. Frank J.....440 Lothrop Rd., Grosse Pointe Farms
Kennary, Mrs. James.....2250 Iroquois, Detroit
Killins, Mrs. Chas.....7712 E. Jefferson Ave., Detroit
King, Mrs. Edward D.....2325 W. Grand Blvd., Detroit
King, Mrs. Melbourne J.....16021 Warwick, Detroit
Knaggs, Mrs. Charles W.....1209 Yorkshire, Grosse Pointe
Knights, Mrs. Edwin M., Jr.....373 Rivard Blvd., Grosse Pointe
Knighton, Mrs. Robert S.....27486 Lathrup St., Birmingham
Koebel, Mrs. R. H.....640 Bedford, Grosse Pointe
Kokowicz, Mrs. R. J.....1151 Buckingham, Grosse Pointe
Kossayda, Mrs. Adam W.....2231 Wilson, Dearborn
Krabbenhoft, Mrs. K. L.....10004 Vernon, Huntington Woods
Krebs, Mrs. William T.....269 Kenwood Court, Grosse Pointe
Kretzschmar, Mrs. J. C.....3060 Seminole, Detroit
Krynicki, Mrs. F. X.....17127 Muirland, Detroit
Kujawski, Mrs. Walter..20897 Littlestone, Harper Woods
Kulaski, Mrs. Chester H.....7500 E. Robinwood Ave., Detroit
Kullman, Mrs. H. J.....Veterans Administration Hosp., Dearborn
LaHood, Mrs. M. J.....15331 Farrer, Detroit
LaMarche, Mrs. Norman O.....4139 Wakefield Rd., St. Johns Woods, Berkley
Lamberson, Mrs. F.....31435 Bingham Rd., Detroit
Lammy, Mrs. James V.....3797 Wakefield, Berkley
Lampman, Mrs. H. H.....42 Puritan Ave., Highland Park
Lang, Mrs. Ernest F.....280 Cloverly Rd., Grosse Pointe
Lange, Mrs. Anthony H.....4502 Grayton, Detroit
Laning, Mrs. George M.....2025 W. Six Mile Rd., Highland Park
Leader, Mrs. Luther R...Cranbrook Rd., Bloomfield Hills
Leibinger, Mrs. Henry R.....511 Barrington Rd., Grosse Pointe
Lemon, Mrs. Bruce K.....8259 Meyers Rd., Detroit

Lepley, Mrs. Fred O.....1125 Three Mile Dr., Grosse Pointe
Leszynski, Mrs. J. S.....8120 E. Jefferson Ave., Apt. 2N, Detroit
Levagood, Mrs. F.....14056 Artesian, Detroit
Lichter, Mrs. Max L.....19320 Berkeley, Detroit
Liddicoat, Mrs. A. G.....18300 Bretton Dr., Detroit
Lightbody, Mrs. J. J.....195 Piper Blvd., Detroit
Lignell, Mrs. Rudolph W.....18109 San Juan, Detroit
Lilly, Mrs. Chas. J.....16649 Princeton, Detroit
Livingood, Mrs. Clarence S.....2950 Iroquois, Detroit
Lockwood, Mrs. Bruce.....16911 Baylis Ave., Detroit
Lofstrom, Mrs. Jas. E.....265 Williams, Grosse Pointe Farms
Longo, Mrs. Salvatore.....918 Barrington Rd., Grosse Pointe
Loranger, Mrs. Clifford B.....888 Lakeshore Rd., Grosse Pointe
Loucks, Mrs. R. E.....29915 13 Mile Rd., Farmington
Lowe, Mrs. Adolf W.....17117 Parkside, Detroit
Luce, Mrs. Henry A.....3421 Seminole, Detroit
Lutz, Mrs. Earl F.....6178 Lantern Lane, Foxcraft, Birmingham
Lynn, Mrs. Harvey D.....18285 Birchcrest Dr., Detroit
Lytle, Mrs. Robert P.....15767 Vaughan, Detroit

MacFarlane, Mrs. Howard W.....3476 Seminole, Detroit
MacGregor, Mrs. W. W.....6320 W. Surrey, Foxcroft, Birmingham
MacKenzie, Mrs. John W.....686 Parker, Detroit
Mackersie, Mrs. William.....18205 Roselawn, Detroit
MacQueen, Mrs. Malcolm D.....2165 Burns Ave., Detroit
Maczewski, Mrs. John.....1357 Sunningdale, Grosse Pointe Woods
Mainwaring, Mrs. R. L.....1910 Russell, Dearborn
Malone, Mrs. John M.....20446 Freeland, Detroit
Maloney, Mrs. John A.....22635 W. 10½ Mile Rd., Rt. #3, Box 11, Birmingham
Mancuso, Mrs. Vincent S.....962 E. Grand Blvd., Detroit
Marecki, Mrs. Vincent.....9869 Chatham, Allen Park
Marsh, Mrs. A. R.....15696 Woodland Ave., Dearborn
Martin, Mrs. Lyndle R.....628 Middlesex, Grosse Pointe
Martin, Mrs. Peter A.....17185 Muirland Ave., Detroit
Martmer, Mrs. Edgar E.....693 Washington Rd., Grosse Pointe
Mattson, Mrs. T. M.....16 Ridge Rd., Pleasant Ridge
May, Mrs. Frederick T.....16637 Parkside, Detroit
McAlonan, Mrs. William T.....630 Merrick Ave., Detroit
McCadie, Mrs. J. H.....14241 Artesian, Detroit
McClellan, Mrs. Gustave L.....2046 W. Boston Blvd., Detroit
McClellan, Mrs. Robert J.....20651 Orangelawn, Detroit
McColl, Mrs. Clark.....19701 Chesterfield, Detroit
McCormick, Mrs. Colin C.....24352 Rockford Dr., Dearborn
McCormick, Mrs. Frank T.....859 Longfellow, Detroit
McDonald, Mrs. A. L.....1247 Berkshire, Grosse Pointe
McDonald, Mrs. Allan.....15015 Ward Ave., Detroit
McDonald, Mrs. William G.....9347 Becker, Allen Park
McDowell, Mrs. Douglas B.....Wayne Co. General Hosp., Eloise
McEvitt, Mrs. Wm. G.....1140 W. Boston Blvd., Detroit
McGraw, Mrs. Arthur B.....70 Kenwood Rd., Grosse Pointe
McIntosh, Mrs. Robert D.....6529 Burnly, Garden City
McIntyre, Mrs. Wm.....1233 Audubon Rd., Grosse Pointe
McKeever, Mrs. George E.....1767 Culver, Dearborn
McKnight, Mrs. Robert E.....19818 Lesure, Detroit
McLean, Mrs. Don....26760 Bloomfield Dr., Birmingham
McNichol, Mrs. L. J.....15033 Littlefield, Detroit
McQuire, Mrs. John F.....22201 Cherry Hill, Dearborn
McRae, Mrs. Donald H.....259 W. Grand Blvd, Detroit
Meek, Mrs. Stuart F.....13020 Kilbourne, Detroit
Menagh, Mrs. Frank R.....4010 Columbus, Detroit
Merrill, Mrs. William O.....W. Long Lake Rd., Bloomfield Hills
Metes, Mrs. John S.....1261 Fairholme Rd., Grosse Pointe
Meyer, Mrs. Frank....23026 Gary Lane, St. Clair Shores
Michael, Mrs. Michael J.....938 S. Renaud Rd., Grosse Pointe
Mitchell, Mrs. C. Leslie..34 Hendrie Lane, Grosse Pointe
Moehlig, Mrs. Robert C.....17544 Muirland, Detroit
Molnar, Mrs. Stephen K.....434 S. Highland, Dearborn
Molner, Mrs. J. G.....14890 Glastonbury Rd., Detroit
Monson, Mrs. Robert C...1070 N. Renaud, Grosse Pointe
Monto, Mrs. Raymond W.....27879 Lathrup, Birmingham
Mopper, Mrs. Coleman.....18716 Littlefield, Detroit
Morgan, Mrs. Donald.....425 Manor, Grosse Pointe
Morley, Mrs. Harold V.....200 Hampshire Ct., Dearborn
Moroun, Mrs. Sheffick John.....203 Lakeland, Grosse Pointe
Mossman, Mrs. John.....18914 Warrington, Detroit
Munson, Mrs. Henry.....466 Rivard, Grosse Pointe
Murphy, Mrs. John M.....60 Lewiston Rd., Grosse Pointe
Murphy, Mrs. Robert T.....19 Oakland Park, Pleasant Ridge
Murray, Mrs. William A.....11841 Ohio, Detroit
Myers, Mrs. Dan W.....1150 Bedford Rd., Grosse Pointe

Nahigian, Mary D.....17371 Annchester, Detroit
Nehra, Mrs. John M.....662 S. Renaud Rd., Grosse Pointe
Nelson, Mrs. Darwin M.....63 Ridge Rd., Grosse Pointe
Nickel, Mrs. Warren.....3154 Lincoln, Dearborn
Nordin, Mrs. Warren A.....2532 Lothrop, Detroit
Norton, Mrs. A. B.....18615 Muirland Ave., Detroit
Noshay, Mrs. William C.....25505 Wareham Dr., Huntington Woods
Novy, Mrs. Robert L.....2910 Iroquois, Detroit
Oetting, Mrs. Edward.....2923 Iroquois, Detroit
Ohmart, Mrs. Galen B.....2150 Iroquois, Detroit
Olmsted, Mrs. George S.....3535 Burning Bush, Bloomfield Hills
Olson, Mrs. James A.....19 Norwich Rd., Pleasant Ridge
Oman, Mrs. Cyrus F.....12608 Wyoming, Detroit
O'Rourke, Mrs. Paul V.....17725 Manderson, Detroit
O'Sullivan, Mrs. G. S.....18129 Sunnybrook, Birmingham
Otlewski, Mrs. Eugene A.....4367 Grayton, Detroit
Owen, Mrs. Clarence I.....1544 Vinewood, Detroit
Owen, Mrs. William H.....6122 Suwannee Rd., Jacksonville, Fla.

Parcells, Mrs. Frank H.....1014 Buckingham, Grosse Pointe
Parr, Mrs. Robert W.....18049 San Juan Dr., Detroit
Parsons, Mrs. John P.....808 Grand Marais, Grosse Pointe
Pasternacki, Mrs. N. T.....7730 E. Jefferson, Detroit
Payne, Mrs. Walter A.....357 Hillcrest, Grosse Pointe
Pedersen, Mrs. H. E.....12 Norwich, Pleasant Ridge
Peggs, Mrs. George F.....8303 Freda, Detroit
Pendy, Mrs. George V.....20170 Renfrew, Detroit
Pendy, Mrs. John M.....896 Lochmoor Blvd., Grosse Pointe
Perkin, Mrs. Frank S.....1049 Yorkshire Rd., Grosse Pointe
Peterman, Mrs. Earl A...19515 Cumberland Way, Detroit
Peterson, Mrs. Robert A.....17581 Prest, Detroit
Petty, Mrs. Thomas A.....1204 Yorkshire Rd., Grosse Pointe
Peven, Mrs. Philip.....19565 Roslyn, Detroit
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Pichette, Mrs. J. Walton.....627 Morley Ct., Dearborn
Pickard, Mrs. O. W.....20208 Lichfield, Detroit
Pietra, Mrs. Alex W.....9405 E. Outer Dr., Detroit
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Poirier, Mrs. R. A.....425 Bryn Mawr, Birmingham
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Porter, Mrs. Frederick G.....19756 Lesure, Detroit
Posch, Mrs. Joseph L.....853 Brys Dr., Grosse Pointe Woods
Potter, Mrs. L. S.....287 Merriweather, Grosse Pointe Farms
Pratt, Mrs. Jean P.....18910 Fairway Dr., Detroit
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Purcell, Mrs. Frank H.....869 Edgemont Park, Grosse Pointe
Quigley, Mrs. William G.....16540 Warwick, Detroit
Quinn, Mrs. Edward L.....1141 Golfview, Birmingham

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Rastello, Mrs. Peter.....4333 Sturtevant, Detroit
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Rebuck, Mrs. John W.....16955 Beverly Rd., Birmingham
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Redfern, Mrs. E. W.....17392 Kirkshire, Birmingham
Reed, Mrs. J. O., Jr.....434 St. Clair, Grosse Pointe
Reed, Mrs. Walter H.....8141 Dexter Blvd., Detroit
Reid, Mrs. Wesley G.....123 Moss, Highland Park
Reive, Mrs. David L.....16002 Oak Dr., Detroit
Rennell, Mrs. Leo P.....18222 Fairfield, Detroit
Reveno, Mrs. Wm. S.....19398 Stratford Rd., Detroit
Reyner, Mrs. Clarence E.....19999 Stratford Rd., Detroit
Reynolds, Mrs. R. P.....17521 Hamilton Dr., Detroit
Rhoades, Mrs. Francis P.....272 Ashland, Detroit
Rice, Mrs. H. R.....20420 Briarcliff, Detroit
Ritter, Mrs. George.....28420 Sunset Dr., Birmingham
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Rizzo, Mrs. Paul.....14874 Seymour, Detroit
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Rowda, Mrs. Michael S.....7 Cambridge Rd., Pleasant Ridge
Rowe, Mrs. Joseph.....14138 Kentfield, Detroit
Ruedemann, Mrs. Albert D.....1018 Three Mile Dr., Grosse Pointe
Ruedemann, Mrs. A. D., Jr.....242 Lewiston, Grosse Pointe
Runge, Mrs. E. F.....25549 Rouge River Dr., Detroit
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Sadler, Mrs. H. Harrison.....594 Rivard, Grosse Pointe
Sadzikowski, Mrs. J. T.....1320 N. Denwood, Dearborn
Sage, Mrs. Bernard S.....317 N. Reginald, Dearborn
Sage, Mrs. Thomas.....379 St. Clair, Grosse Pointe
Salchow, Mrs. Paul T.....8285 Hartwell, Detroit
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Sander, Mrs. Frank V.....7255 Merrybrook Dr., Birmingham
Sapala, Mrs. Andrew.....13021 Mackenzie Ave., Detroit
Sawyer, Mrs. Harold V.....8900 E. Jefferson Ave., Apt. 718, Detroit
Scarney, Mrs. Herman D.....5400 Pontiac Trail Rt. 5, Pontiac
Schillinger, Mrs. Harold K.....4838 Neckel, Dearborn
Schimek, Mrs. Robert A.....13720 Elgin, Oak Park
Schlafer, Mrs. Nathan H.....18420 Wildemere, Detroit
Schmaltz, Mrs. John D.....17656 Grandville, Detroit
Schmidt, Mrs. Werner F.....411 Roland Ct., Grosse Pointe
Schneck, Mrs. Robert J.....285 Voltar, Grosse Pointe
Schuknecht, Mrs. Harold F...500 Neff Rd., Grosse Pointe
Schulte, Mrs. Carl H.....20171 Renfrew, Detroit
Schultz, Mrs. Clarence.....5801 Argyle, Dearborn
Schweigert, Mrs. C. F.....12185 E. Outer Dr., Detroit
Seeley, Mrs. J. B.....7870 Oakman Blvd., Dearborn
Segar, Mrs. L. F.....19000 Birchcrest, Detroit
Self, Mrs. William G.....1067 Berkshire, Grosse Pointe
Sellers, Mrs. Chas. W.....2051 Chicago Blvd., Detroit
Sellers, Mrs. Graham.....3371 Sherbourne Rd., Detroit
Sewell, Mrs. George.....31801 Arlington, Beverly Hills
Sewell, Mrs. George R.....352 Elmhurst Ave., Highland Park
Sharp, Mrs. Elwood A.....635 Neff Rd., Grosse Pointe
Sharrer, Mrs. Chas. H.....1133 Grayton Rd., Grosse Pointe
Shekerjian, Mrs. Armen.....20194 Wakefield, Detroit
Sherman, Mrs. William L.....201 E. Kirby Ave., Detroit
Sherrin, Mrs. Edgar.....32 Oakland Park Blvd., Pleasant Ridge
Shields, Mrs. William.....510 W. Hildale, Detroit
Shifrin, Mrs. Peter G.....2005 Oakman Blvd., Detroit
Shreve, Mrs. Alfred J.....7 Amherst Lane, Dearborn
Shumaker, Mrs. E. J.....17606 Wildemere, Detroit
Sieber, Mrs. Edward H.....5 Byfield Lane, Dearborn
Siefert, Mrs. Wm. A.....15920 Glastonbury Rd., Detroit
Sigler, Mrs. John W.....1356 Greenlawn, Birmingham
Sippola, Mrs. Geo. W.....13603 LaSalle Blvd., Detroit
Simpson, Mrs. Gordon E.....602 Cadieux Rd., Grosse Pointe
Sinclair, Mrs. James W.....21806 Moross Rd., Grosse Pointe
Singer, Mrs. Floyd W.....24441 Emerson, Dearborn
Slaugenhaupt, Mrs. J. G.....16887 Lawton, Detroit
Slevin, Mrs. John G.....1132 Whittier Rd., Grosse Pointe Park
Sly, Mrs. Robert F.....22213 Tenny St., Dearborn
Small, Mrs. John T.....17140 James Couzens, Detroit
Smith, Mrs. F. Janney....269 Wimbleton Dr., Birmingham
Smolenski, Mrs. John.....13600 Woodmont, Detroit
Somers, Mrs. Donald C.....4205 Valley Forge, Rt. 1, Birmingham
Sonda, Mrs. L. Paul.....8625 Marygrove, Detroit
Spademan, Mrs. L. C.....484 Warren Court, Birmingham
Spalding, Mrs. Edward.....214 Cloverly, Grosse Pointe Farms
Sphire, Mrs. Raymond.....19935 Doyle Pl. East, Grosse Pointe
Stapleton, Mrs. Wm. J.....201 E. Kirby, Apt. 404, Detroit
Staryk, Mrs. E.....1010 N. Oxford, Grosse Pointe
Staub, Mrs. Howard.....9210 Jerome, Detroit
Staudt, Mrs. Louis.....3341 Coolidge, Royal Oak
Stebbins, Mrs. C. E.....14176 Glastonbury, Detroit
Stefani, Mrs. E. L.....18600 Birchcrest Dr., Detroit
Steinbach, Mrs. A. L.....19335 Pinehurst, Detroit
Steinbach, Mrs. Henry B.....411 Lakeland, Grosse Pointe
Stellhorn, Mrs. C. E.....16589 Warwich Ave., Detroit
Sterling, Mrs. R. R.....52 Oxford Rd., Pleasant Ridge
Stevens, Mrs. C. H.....15422 Monor, Detroit
Stewart, Mrs. Thomas....500 Overhill Rd., Birmingham
Stiefel, Mrs. Daniel M.....20094 Canterbury, Detroit
Stirling, Mrs. Alexander M.....1005 Kensington Ave., Grosse Pointe
St. Louis, Mrs. R. J.....10909 W. Jefferson Ave., River Rouge
Stockwell, Mrs. Benjamin W.....192 Lothrop Rd., Grosse Pointe Farms
Stockwell, Mrs. Glen W.....10210 Second Blvd., Apt. D-2, Detroit
Stokfisz, Mrs. Thaddeus....7025 Oakman Blvd., Dearborn
Straith, Mrs. Claire L.....19490 Parkside Ave., Detroit
Straith, Mrs. Richard.....38 Oxford Rd., Pleasant Ridge
Strand, Mrs. Martin E.....451 Golfcrest, Dearborn
Sugar, Mrs. David I.....13120 Broadstreet, Detroit
Sutherland, Mrs. J. M.....716 Pallister, Detroit
Suwinski, Mrs. Raymond H.....312 Lexington Blvd., Royal Oak
Swanson, Mrs. Carl M.....523 Lakepointe, Grosse Pointe
Swanson, Mrs. Robert.....1601 Beaupre Rd., Grosse Pointe Farms
Swartz, Mrs. Fred, Jr.....1137 Balfour Rd., Grosse Pointe
Swift, Mrs. K. L.....38285 W. 12 Mile Rd., Farmington

Tenerowicz, Mrs. R. G.....1629 Lincolnshire Rd., Detroit
Thompson, Mrs. Hugh..2559 Bradway Blvd., Birmingham
Thumann, Mrs. Robert C.....666 Washington Rd., Grosse Pointe
Tobin, Mrs. John S.....23056 Hayden Rd., Farmington
Townsend, Mrs. Frank M.....15231 Windmill Pointe Dr., Grosse Pointe
Tremain, Mrs. Harold.....19700 Steel Ave., Detroit
Truba, Mrs. Paul K.....8323 Ohio Ave., Detroit
Truszkowski, Mrs. E. G.....9213 E. Outer Dr., Detroit
Turcotte, Mrs. Vincent J.....545 Lakeland, Grosse Pointe
Turnbull, Mrs. Jack V.....321 S. York, Dearborn

Turner, Mrs. John.....9078 Minock, Detroit
Tuynman, Mrs. Peter E.....18781 Dolores, Birmingham
Usndek, Mrs. Harold....19700 Sunnyside, St. Clair Shores
Van Raaphorst, Mrs. L. F.....331 River Lane, Dearborn
Veldhuis, Mrs. Andrew H.....17140 Beechwood, Birmingham
Vonder Heide, Mrs. E. C.....17190 Strathmoor, Detroit
Vorwald, Mrs. Arthur.....210 McKinley, Grosse Pointe
Vossler, Mrs. Albert G.....222 Moran Rd., Grosse Pointe Farms
Wainstock, Mrs. Michael A.....18925 Wildemere Ave., Detroit
Walker, Mrs. Frank, II.....10421 Cadieux Rd., Detroit
Walker, Mrs. Roger V.....1415 Parker Ave., Apt. 1066, Detroit
Walker, Mrs. Rodger V., Jr.....4324 Biddle, Wayne
Walkowiak, Mrs. Robert.....13544 Monica, Detroit
Walser, Mrs. H. C.....270 Suffield Rd., Birmingham
Walter, Mrs. Floyd J.....15464 Ferguson, Detroit
Wangner, Mrs. Wm. F.....539 Mt. Vernon Blvd., Royal Oak
Ward, Mrs. Clyde H.....19100 Glenwood, Birmingham
Warren, Mrs. Wadsworth.....2942 Burns, Detroit
Watson, Mrs. Douglas J.....20425 Woodworth Way, Birmingham
Watson, Mrs. Edwin.....Pembroke Dr., Bloomfield Hills
Watts, Mrs. Joseph.....17146 Muirland, Detroit
Weaver, Mrs. Clarence E.....18962 Warrington Dr., Detroit
Weaver, Mrs. Delmar F.....1100 Bishop Rd., Grosse Pointe
Weber, Mrs. Karl W.....674 N. Renaud, Grosse Pointe
Webster, Mrs. John.....15439 Windmill Point, Grosse Pointe
Weed, Mrs. Milton R.....1997 E. Grand Blvd., Detroit
Weidner, Mrs. John.....24501 Emerson, Dearborn
Weiser, Mrs. Frank A.....235 Charlevois, Grosse Pointe
Wendel, Mrs. J. S.....17310 Wildemere, Detroit
Weston, Mrs. Earl E.....5655 Forman Dr., Wing Lake, Birmingham
Weston, Mrs. Horace L.....16196 Sunderland, Detroit
Weyher, Mrs. R.....5383 Oakman Blvd., Detroit
Wheeler, Mrs. Stewart C.....16703 Warwick Rd., Detroit
Whelan, Mrs. Joseph....1360 Oxford Rd., Grosse Pointe
White, Mrs. Milo R.....1187 Longfellow, Detroit
Whitehouse, Mrs. Fred W.....19639 Cardoni, Detroit
Whiteley, Mrs. Robert K.....216 Lakeland, Grosse Pointe
Wiant, Mrs. John L.....1205 Chesterfield, Birmingham
Wiechowski, Mrs. Henry E.....8054 Rolyat, Detroit
Wietersen, Mrs. Fred K.....270 Manor Rd., Rt. 2, Birmingham
Wight, Mrs. Frederick B.....1415 Parker, Detroit
Wikiera, Mrs. Edw. S.....17400 W. Outer Dr., Dearborn
Williams, Mrs. C. J.....1342 Grayton Rd., Grosse Pointe
Wilson, Mrs. Gerald A.....4800 Leslie Ave., Detroit
Wise, Mrs. Robert K.....18972 Muirland, Detroit
Wissman, Mrs. H. C.....6815 Oakman Blvd., Dearborn
Witter, Mrs. Joseph A.....17516 Fairfield, Detroit
Witwer, Mrs. E. R...17452 Third Ave., Apt. 201, Detroit
Wolfe, Mrs. Max O.....8905 E. Jefferson, Detroit
Wolter, Mrs. James G.....4494 Chamberlain, Birmingham
Wood, Mrs. Douglas..30550 Marimoor Dr., Birmingham
Wood, Mrs. Kenneth A.....4833 Mayflower Ct., Bloomfield Hills
Woolfenden, Mrs. Joseph.....22436 Edgewood Dr., St. Clair Shores
Wunsch, Mrs. Richard....497 Rivard Blvd., Grosse Pointe
Yott, Mrs. Wm. J.....854 Lake Shore Dr., Grosse Pointe
Young, Mrs. Don A.....Dunston Rd., Bloomfield Hills
Young, Mrs. Lloyd B.....16603 Shaftsbury Rd., Detroit
Zabinski, Mrs. Edward..1173 Harvard Rd., Grosse Pointe
Zawacki, Mrs. Sigmund.....12950 S. Morrow Circle, Dearborn
Zbudowski, Mrs. Myron.....889 Bloomcrest, Birmingham
Zukowski, Mrs. Henry J...72 N. Deeplands, Grosse Pointe

WAYNE-SOUTHERN COUNTY

Allen, Mrs. John V.....15083 Regina, Allen Park
Alban, Mrs. E. J.....15287 Philomene, Allen Park
Beck, Mrs. Stanley.....16649 Churchill, Wyandotte
Bott, Mrs. E. T.....1804 13th St., Wyandotte
Bower, Mrs. Donald.....1005 King's Highway, Lincoln Park
Boyd, Mrs. John.....2052 Church Place, Trenton
Brown, Mrs. Chas.....1729 Davis, Wyandotte
Brown, Mrs. Robert....22623 W. River Rd., Grosse Ile
Bruer, Mrs. Edgar.....9037 Park Ave., Allen Park
Braden, Mrs. R. G.....7728 Island, Grosse Ile
Butler, Mrs. R.....9415 Morton View, Dearborn
Cameron, Mrs. Arthur H.....155 Vinewood, Wyandotte
Cahalan, Mrs. J.....13381 Catalpa, Wyandotte
Coan, Mrs. Glenn L.....19603 Park Lane, Grosse Ile
Cook, Mrs. Jas. C.....2730 21st St., Wyandotte
Davis, Mrs. E. F.....1493 23rd St., Wyandotte
Deering, Mrs. R. J.....26255 W. River Rd., Grosse Ile
Durocher, Mrs. Raymond E.....4160 Jefferson, Ecorse
Easterly, Mrs. Robert....2514 Eighteenth St., Wyandotte
Engel, Mrs. Earl.....33 Emmons Court, Wyandotte
Erickson, Mrs. Eldon W.....9720 Lakewood Ave., Grosse Ile
Foote, Mrs. Jas. A.....870 Winchester, Lincoln Park
Frothingham, Mrs. G. E.....1657 23rd St., Wyandotte
Ganos, Mrs. Thomas.....9238 Vine, Allen Park
Gilbert, Mrs. Harold R.....13146 Phelps, Wyandotte
Herkimér, Mrs. Daniel R.....1802 Buckingham Ave., Lincoln Park
Hileman, Mrs. Lee.....755 New York Ave., Lincoln Park
Hoffer, Mrs. Thomas.....1556 Walnut, Dearborn
Honor, Mrs. William H.....20446 E. River Rd., Grosse Ile
Hookey, Mrs. John A.....2872 Van Alstyne, Wyandotte
Jones, Mrs. W.....15839 Crescent, Allen Park
Kazdan, Mrs. Morris.....15024 McLain, Allen Park
Knapp, Mrs. B. S.....7536 Colwell, Allen Park
Knox, Mrs. Ross M.....15400 Philomene Ave., Allen Park
Kowaleski, Mrs. John.....1104 Elm St., Wyandotte
Kuhn, Mrs. R.....27857 Elba, Grosse Ile
Kutsche, Mrs. John D.....2616 Lenox Ave., Trenton
Kwasiborski, Mrs. Stanley.....9495 Island, Grosse Ile
LaBerge, Mrs. J. M.....1767 Ash St., Wyandotte
Lebamoff, Mrs. A. J.....7427 Rosedale, Allen Park
Libbrecht, Mrs. R. B.....15330 Wick, Allen Park
Maibauer, Mrs. Frederick P.....1742 Ash St., Wyandotte
Maynard, Mrs. F.....14870 Harrison, Allen Park
McColl, Mrs. C.....2285 21st St., Wyandotte
McGlaughlin, Mrs. N. D.....2062 22nd St., Wyandotte
Morley, Mrs. Arthur.....2453 22nd St., Wyandotte
Mikesell, Mrs. M. J.....8615 Manor, Allen Park
Nagle, Mrs. John W.....26633 W. River Dr., Grosse Isle
Noble, Mrs. Wm.....13160 Oakdale Ave., Wyandotte
Proud, Mrs. Robert H.....29155 Evergreen, Flat Rock
Proud, Mrs. Russel F.....26147 Huron River Dr., Flat Rock
Ray, Mrs. Kenneth.....2254 22nd St., Wyandotte
Ridge, Mrs. Ralph....3227 Van Alstyne Blvd., Wyandotte
Rinkel, Mrs. R. W.....1555 Arlington, Lincoln Park
Roberts, Mrs. A. J.....859 Winchester, Lincoln Park
Rogers, Mrs. J.....2329 20th St., Wyandotte
Schroeder, Mrs. C. F.....26505 E. River Rd., Grosse Ile
Schwocko, Mrs. Niles.....15616 Thomas, Allen Park
Speck, Mrs. Carlos.....14870 Harrison Ave., Allen Park
Stryker, Mrs. Walter....21604 East River Rd., Grosse Ile
Szladek, Mrs. Frank L.....657 Winchester Ave., Lincoln Park
Taurence, Mrs. Wm. H.....2316 20th St., Wyandotte
Tenaglia, Mrs. Thomas.....280 King's Highway, Lincoln Park
Thomson, Mrs. Daniel..20638 East River Rd., Grosse Ile
Van Becelaere, Mrs. Lawrence, Jr.....921 Garfield, Lincoln Park
White, Mrs. Donald....1313 Cleveland Ave., Lincoln Park
Whitelock, Mrs. E. H.....637 King's Hghwy., Wyandotte
Worzniak, Mrs. Joseph.....1639 Davis Ave., Wyandotte

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Daugherty, Mrs. Robt.....746 E. Division, Cadillac
Imman, Mrs. John.....Lake City
Lommen, Mrs. Ralph.....Manton
Masseling, Mrs. Henry J.....McBain
Moon, Mrs. William.....407 E. Chapin, Cadillac
Moore, Mrs. Gregory.....734 E. Division, Cadillac
Murphy, Mrs. Michael.....213 Prospect, Cadillac
Paye, Mrs. Phillip.....Lake Mitchell Drive, Cadillac
Peterson, Mrs. William.....Mesick
Posthuma, Mrs. Millard.....423 E. Cass St., Cadillac
Stokes, Mrs. William.....Lake City
Tornberg, Mrs. Gordon.....217½ S. Park, Cadillac

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Loupee, Mrs. S. L.....108 Orchard St., Dowagiac
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Parmenter, Mrs. E. S.....140 Washington E., Alpena
Sawyer, Mrs. W. W.....Bow Beese Lake, Hillsdale
Vrbanac, Mrs. John J.....Hart
Wood, Mrs. M. G.....19 Courtland, Hart
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Michigan State Medical Assistants' Society

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Elmore, Margaret.....A. B. Gwinn, M.D. & W. G. Logan, M.D. 200 City Bank Bldg., Hastings

Kahler, Letha M.....W. R. Birk, M.D. 146 East State St., Hastings

BRANCH COUNTY

Van Dyke, Betty.....D. M. Harris, M.D Hillsdale District Health Dept. 35 S. Sprague St., Coldwater

Vore, Treeva.....D. M. Harris, M.D. Hillsdale District Health Dept. 35 S. Sprague St., Coldwater

CLARE COUNTY

Lucy, Mrs. Martha.....Kuno Hammerberg, M.D. 403 McEwan Road, Clare

HILLSDALE COUNTY

Burnett, Mrs. Ellen.....Ira Woodrow Wiggins, M.D. 214 South St., Jonesville

IONIA COUNTY

Stephens, Mrs. Frances.....J. D. Snider, M.D. & J. H. Buck, M.D. 111 N. Kidd, Ionia

MACOMB COUNTY

Maxwell, Mrs. Frances.....711 Monitor Leader Bldg., Mt. Clemens

Roeder, Mrs. Nancy Jane.....E. J. Dudzinski, M.D. 51034 Washington, New Baltimore

WASHTENAW COUNTY

Clark, Jessie Elizabeth....Frederick B. Williamson, M.D. 47064 McBride Ave., Belleville

Sanders, Elizabeth P.....Phillip Grillo, M.D. 265 Main St., Belleville

WEXFORD COUNTY

Brown, Marion.....Dean Seger, M.D. Box 32, Lake City

Organized Counties

ALLEGAN COUNTY

Number of Members, 22

Ater, Mrs. Virginia.....Harry Schneiter, M.D. 111½ Locust, Allegan

Bensinger, Myrtle.....Harry Schneiter, M.D. 111½ Locust, Allegan

Bronkhorst, Mrs. Maxine.....Edwin Topp, M.D. Plainwell, Michigan

Brown, Virginia.....Harry Schneiter, M.D. 111½ Locust, Allegan

Endsley, Thelma.....James Clark, M.D., Fenville

Gremillion, Mrs. Elsie....Allegan Health Center, Allegan

Harris, Beryl.....James Clark, M.D., Fenville

Hitchock, Mrs. Helen.....A. P. Brachman, M.D. 222 Trowbridge, Allegan

Kriegbaum, Doris.....O. Stuck, M.D., Otsego

Lee, Mrs. Jeanette.....Harry Schneiter, M.D. 111½ Locust, Allegan

McIntire, Mrs. Maxine.....R. A. McFadden, M.D. Bloomingdale

Marciniak, Mrs. Betty Jane.....Edwin Topp, M.D. Plainwell

Myers, Mrs. Eloise.....Allegan Health Center, Allegan

Plunkett, Ann.....James Clark, M.D., Fenville

Pullen, Mrs. Louise.....A. P. Brachman, M.D. 222 Trowbridge, Allegan

Rantz, Mrs. Mary Jane..Plainwell Sanitarium, Plainwell

Reimink, Mrs. Betty.....A. P. Brachman, M.D. 222 Trowbridge, Allegan

Shafer, Mrs. Beverly.....Allegan Health Center, Allegan

Spreitzer, Mrs. Cecilia.....James E. Mahan, M.D. 402 Trowbridge, Allegan

Wilkinson, Mrs. Audrey..Allegan Health Center, Allegan

Wilson, Phyllis.....Plainwell Sanitarium, Plainwell

Wynne, Florence.....Allegan Health Center, Allegan

BAY COUNTY

Number of Members, 41

Bennett, Maxine.....P. L. De Waele, M.D.
1106 N. Johnson, Bay City
Bergman, Esther.....H. T. Knobloch, M.D.
1102 Columbus, Bay City
Bowsher, Patricia.....M. J. Dardas, M.D.
1413 Center, Bay City
Bublitz, Arlene.....H. C. Shafer, M.D.
101 W. John, Bay City
Cowan, Doris.....G. M. Brown, M.D.
207 N. Walnut, Bay City
DeLorge, Helen.....S. M. Pearson, M.D.
101 W. John, Bay City
Dufresne, Shirley.....L.F. Foster, M.D.
919 Washington, Bay City
Elbinger, Marion.....J. W. Wilcox, M.D.
1115-5th, Bay City
Feibke, Helen.....G. M. Brown, M.D.
207 N. Walnut, Bay City
Fitch, Grace.....H. H. Heuser, M.D.
207 Davidson Bldg., Bay City
Harris, Delphine.....F. J. Chapin, M.D.
101 W. John, Bay City
Hash, Alice.....A. D. Allen, M.D.
101 W. John, Bay City
Hogle, Martha.....W. R. McDonald, M.D. &
W. L. Howland, M.D., Pinconning
Hohmann, Ann.....E. J. Kulinski, M.D.
207 N. Walnut, Bay City
Karrick, Lee.....O. J. Johnson, M.D.
207 N. Walnut, Bay City
Kaunitz, Altha.....C. W. Reuther, M.D.
101 W. John, Bay City
Kehrl, Evelyn.....Jones Clinic, 5th at Jackson, Bay City
Lance, Alva.....J. N. Asline, M.D.
207 N. Walnut, Bay City
Lentz, Mary.....F. J. Chapin, M.D.
101 W. John, Bay City
McLellan, Betty.....O. J. Johnson, M.D.
207 N. Walnut, Bay City
Marquess, Caroline.....Allen Medical Group
101 W. John, Bay City
Mitchell, Marcia.....Z. E. Taher, M.D.
201 Davis Hill Arcade, Bay City
Molyneaux, Beatrice.....C. W. Reuther, M.D.
101 W. John, Bay City
Nighswander, Margaret.....L. F. Foster, M.D.
919 Washington, Bay City
Quigley, Blanche.....W. R. McDonald, M.D. &
W. L. Howland, M.D., Pinconning
Roeder, Lillian.....H. K. Cook, M.D.
101 W. John, Bay City
Rouche, Gretchen.....W. S. Stinson, M.D.
101 W. John, Bay City
Satkowiak, Albina..Jones Clinic, 5th at Jackson, Bay City
Schneider, Gloria.....J. N. Asline, M.D.
207 N. Walnut, Bay City
Sheldon, Florence.....D. J. Mosiet, M.D.
101 W. John, Bay City
Shupe, Donna.....Jones Clinic, 5th at Jackson, Bay City
Sowers, Mary.....H. C. Shafer, M.D.
101 W. John, Bay City
Stevens, Connie.....M. J. Dardas, M.D.
1413 Center, Bay City
Swanson, Virginia.....D. J. Mosier, M.D.
101 W. John, Bay City
Toska, Bessie.....Neal Moore, M.D.
704 N. Jackson, Bay City
Van Mullekmon, Arlene.....R. P. Gunn, M.D.
200 Lafayette, Bay City
Verity, Gertrude.....W. R. McDonald, M.D. &
W. L. Howland, M.D.. Pinconning
Walthers, Elaine.....P. L. Dewaele, M.D.
1106 N. Johnson, Bay City
Wells, Catherine.....Allen Medical Group
101 W. John, Bay City
Wheeler, Clara.....H. T. Knobloch, M.D.
1102 Columbus, Bay City
Zaremba, Madeline.....A. J. Zaremba, M.D.
108 S. Madison, Bay City

BERRIEN COUNTY

Number of Members, 38

Anderson, Margaret.....Memorial Hospital Laboratory
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Barr, Marian.....Memorial Hospital Office, St. Joseph
Berry, Nadean.....J. G. Ruth, M.D.
925 Pipestone, Benton Harbor
Bodtke, Carmen.....K. H. Cowdery, M.D. &
H. I. Kelsall, M.D., 1600 Niles, St. Joseph
Case, Audrey.....John T. Manning, M.D.
922 Main St., St. Joseph
Corders, Arlene.....Memorial Hospital Insurance Office
St. Joseph
Donnellan, Kathleen.....Wm. H. Johnston, M.D.
505 Pleasant, St. Joseph
Dooling, Kathleen.....Franklyn G. Rice, M.D.
324 N. 4th St., Niles
Frobel, Ruth.....M. J. Feeley, M.D. &
J. W. Skinner, M.D., 612 Elm St., St. Joseph
Gogolin, Rose.....H. J. Cawthorne, M.D.
239 Pipestone, Benton Harbor
Haak, Marilyn.....P. G. Hanna, M.D.
10 Century Bldg., St. Joseph
Hansley, Enid M.....Memorial Hospital Admitting Office
St. Joseph
Herman, Alice.....Memorial Hospital Record Room
St. Joseph
Hildebrand, Ruth.....J. G. Ruth, M.D.
925 Pipestone, Benton Harbor
Houser, Joyce M.....Stanley Mesirow, M.D.
611 Fidelity Bldg., Benton Harbor
Howorth, Violet.....Marvin H. Strick, M.D.
309 Fidelity Bldg., Benton Harbor
Ingleright, Barbara.....Wm. H. Johnston, M.D.
505 Pleasant, St. Joseph
Kibler, Pat.....Thomas P. Hayes, M.D.
922 Main St., St. Joseph
Kickels, Evelyn.....R. E. Lininger, M.D. &
W. H. Benner, M.D., Memorial Hospital, St. Joseph
Kile, Marceline.....John T. Manning, M.D.
922 Main St., St. Joseph
Leonard, Mary.....Charles B. Porter, M.D.
170 Wall St., Benton Harbor
Ludwig, Leona.....Thomas P. Hayes, M.D.
922 Main St., St. Joseph
McFarland, Tresa.....Alvin Swingle, M.D.
84 W. Main St., Benton Harbor
McKay, Margaret.....Donald W. Thorup, M.D.
603 Fidelity Bldg., Benton Harbor
McKean, Elva.....Jack Bronfenbrenner, M.D.
315 Fidelity Bldg., Benton Harbor
Ogden, Lillian.....Barbara Green, M.D. &
Robert Green, M.D., 2600 Morton Ave., St. Joseph
Postelli, Lucille D.....R. E. Lininger, M.D. &
W. H. Benner, M.D., Fidelity Bldg., Benton Harbor
Raschke, Mary Ann.....R. E. Lininger, M.D. &
W. H. Benner, M.D., Mercy Hospital, Benton Harbor
Ratter, Patricia.....Alvin J. Swingle, M.D.
84 W. Main St., Benton Harbor
Richards, Mildred.....C. T. Loftus, M.D., Administrator
Mercy Hospital, Benton Harbor
Rodgers, Mildred.....Thomas P. Hayes, M.D.
922 Main St., St. Joseph

Siebert, La Rue.....Frank King, Jr., M.D.
610 Fidelity Bldg., Benton Harbor
Taylor, Clara.....Wm. Butler, M.D. &
Richard Crowell, M.D.
12 Peoples Bank Bldg., St. Joseph
Treadway, Nora.....Barbara Green, M.D. &
Robert Green, M.D., 2600 Morton Ave., St. Joseph
Vogelsang, Mariann.....N. J. Hershey, M.D.,
R. E. Holt, M.D., R. L. Landgraf, M.D. &
J. W. Strayer, M.D., Niles
Weik, Caroline.....K. H. Cowdery, M.D. &
H. I. Kelsall, M.D., 1600 Niles, St. Joseph
Willie, Caroline.....Dean K. Ray, M.D.
617 Elm St., St. Joseph
Yeomans, Sally.....R. C. Conybeare, M.D.
416 Fidelity Bldg., Benton Harbor

CALHOUN COUNTY

Number of Members, 62

Aldridge, Dorothy B.....P. C. Kingsley, M.D. &
John Robbert, M.D., 191 College St., Battle Creek
Alspaugh, Kathleen.....R. S. Simpson, M.D.
302 Clover Lane, Battle Creek
Bacon, Velma.....P. J. Diamante, M.D.
R.F.D. 2, Battle Creek
Ball, Mrs. Catherine.....S. A. Yanitelli, M.D.
108 S. 24th St., Battle Creek
Beck, Vonda.....Jos. Levy, M.D.
105 N. Union St., Battle Creek
Bothwell, Mrs. Jane.....Harold R. Bodine, M.D.
716 Mich. National Bank Bldg., Battle Creek
Brooker, Helen.....C. G. Wencke, M.D.
136 North Ave., Battle Creek
Brydges, Jane.....Geo. Zindler, M.D.
54 Wren St., Battle Creek
Capman, Mrs. Dorothy.....J. E. Coakes, M.D.
112 W. Mansion, Marshall
Church, Catherine.....J. E. Forseyth, M.D.
612 N. Clinton St., Albion
Chute, Kathleen.....R. L. Mustard, M.D.,
R. A. Stiefel, M.D., J. W. Hubly, M.D. &
E. M. Chandler, M.D.
1407 Security Bank Bldg., Battle Creek
Coakes, Mrs. Rose Mary.....J. E. Coakes, M.D.
112 W. Mansion, Marshall
Culver, Harriett.....E. L. Hansen, M.D.
33 Highland Ave., Battle Creek
Daglow, Vivian J.....R. J. Campbell, M.D.
140 N.E. Capitol, Battle Creek
Dart, Jean.....G. W. Slagle, M.D. &
R. W. Brown, M.D., 192 N. 24th St., Battle Creek
Davis, Marie.....Harold Dailey, M.D.
707 N. Ionia St., Albion
Diggs, Edna.....F. L. Lam, M.D.
47 W. Northside Drive, Battle Creek
Doane, Kay.....F. L. Lam, M.D.
310 Meadow Drive, Battle Creek
Foust, Pearl.....P. J. Diamante, M.D.
150 Eldredge St., Battle Creek
Fetzer, Ruth.....A. A. Humphrey, M.D.
515 Woods Drive, Battle Creek
Gibson, Emma C.....S. A. Yanitelli, M.D.
1331 W. Michigan, Battle Creek
Golobensky, Mrs. Nan.....G. J. Durnam, M.D.
1212 Jackson St., Albion
Goodell, Frances.....El. Hansen, M.D.
216 North Ave., Battle Creek
Greene, Mrs. Alta.....R. L. Mustard, M.D. &
R. A. Stiefel, M.D., J. W. Hubly, M.D. &
E. M. Chandler, M.D.
282 Eldred St., Battle Creek
Griffin, Donna.....G. W. Slagle, M.D. &
R. W. Brown, M.D., 140 Capital Ave., N.E.
Battle Creek
Grodi, Ruth.....R. K. Curry, M.D.
301 W. Everett St., Homer
Hankinson, Mrs. Mary.....D. R. Worgess, M.D.
99 Post Ave., Battle Creek
Jerrell, Mrs. Frances.....P. C. Kingsley, M.D. &
John Robbert, M.D., 191 College St., Battle Creek
Johnson, Dorothy.....Geo Zingler, M.D.
268 Garfield Ave., Battle Creek
Jones, Marion.....T. K. Jones, M.D.
118 W. Green St., Marshall
Kern, Margaret.....Kenneth Way, M.D.
142½ W. Michigan Ave., Marshall
Lassen, Elva.....R. S. Simpson, M.D.
124 S. 22nd St., Battle Creek
Leatherbery, Donna.....E. L. Hansen, M.D.
346 Garfield Ave., Battle Creek
Lewis, Mrs. Jean M.....R. L. Mustard, M.D.,
R. A. Stiefel, M.D., J. W. Hubly, M.D. &
E. M. Chandler, M.D.
1407 Security Bank Bldg., Battle Creek
Lewis, Mary E.....D. K. Hibbs, M.D.
623 Post Bldg., Battle Creek
McCray, Mrs. Jean.....R. J. Campbell, M.D.
140 N.E. Capital Ave., Battle Creek
Miller, Thelma.....Stephen Fairbanks, M.D.
909 Sheridan Ct., Albion
Miner, Ruth.....Frank Strohmenger, M.D.
104 W. Park St., Albion
Moffitt, Irene.....L. P. Shipp, M.D.
890 Capital Ave. N.E., Battle Creek
North, Mary.....R. L. Mustard, M.D. &
R. A. Stiefel, M.D., J. W. Hubly, M.D. &
E. M. Chandler, M.D.
65½ Calhoun St., Battle Creek
Parent, Mrs. Frances.....R. J. Campbell, M.D.
140 N. E. Capital Ave., Battle Creek
Peck, Melvine.....C. M. Mercer, M.D.
214 Duane St., Battle Creek
Poyer, Eileen P.....J. E. Rosenfeld, M.D.
158 N.E. Capital Ave., Battle Creek
Rising, Dorothy.....R. K. Curry, M.D.
301 W. Everett St., Homer
Roberts, Joan.....R. J. Campbell, M.D.
127 W. Manchester St., Battle Creek
Robinson, Atholyn.....C. W. Royer, M.D.
204 W. Roosevelt St., Battle Creek
Schlottman, Ruby.....C. M. Mercer, M.D.
269 Laurel Drive, Battle Creek
Shedd, Mrs. Reta V.....A. D. Sharp, M.D.
308½ S. Superior, Albion
Sheehan, Genevieve.....M. J. Capron, M.D.
109 North Ave., Battle Creek
Slager, Mrs. Katherine.....P. C. Kingsley, M.D. &
John Robbert, M.D., 191 College, Battle Creek
Smith, Essie.....P. P. Bonifer, M.D.
R. 1, Box 551, Augusta
Summerfield, Mrs. Mary.....K. F. Way, M.D.
105 N. Jefferson, Marshall
Taylor, Addie.....G. W. Slagle, M.D. &
R. W. Brown, M.D., 5 John R. St., Battle Creek
Thompson, Mrs. Betty C.....P. C. Kingsley, M.D. &
John Robbert, M.D., 191 College, Battle Creek
Trudgeon, June.....J. E. Rosenfeld, M.D.
48 Winter St., Battle Creek
Tupper, Mrs. Helen.....P. C. Kingsley, M.D. &
John Robbert, M.D., 191 College, Battle Creek
Vandervoort, Mrs. Betty J.....L. R. Keagle, M.D.
196 North Ave., Battle Creek
Waltz, Mrs. Phyllis.....R. S. Simpson, M.D.
1507 Wolverine Tower, Battle Creek
Warson, Barabara J.....R. C. Rowan, M.D.
112 W. North St., Albion
Whalen, Mrs. Ruth H.....A. R. Dickson, M.D.
127 Darragh St., Battle Creek

Williams, Helen.....Alice Campbell, M.D.
930 N. Monroe St., Albion

Zinn, Mrs. Joyce.....R. J. Campbell, M.D. &
J. R. Power, M.D.
140 N.E. Capital Ave., Battle Creek

DETROIT

Number of Members, 64

Anderson, Edna.....M. E. Fowler, M.D.
247 E. Warren, Detroit
Anderson, Mabel.....J. G. Lumpkin, M.D.
243 E. Warren, Detroit
Anderson, Wilma.....J. G. Reid, M.D. &
J. J. Horvath, M.D.
1337 David Whitney Bldg., Detroit
Bachman, Mrs. Theresa.....Wm. A. Summers, M.D.
1613 David Whitney Bldg., Detroit
Badowski, Cecilia.....4720 McDougall, Detroit
(Unemployed at present)
Baker, Mrs. Helen.....Memorial Hospital Clinic
23700 Van Dyke Ave., Van Dyke
Ball, Babs.....Doctors Group
2336 Van Alstyne Ave., Wyandotte
Barbaglia, Regina M.....E. C. Baumgarten, M.D. &
T. W. Baumgarten, M.D.
8045 E. Jefferson Ave., Detroit
Bartlett, Esther.....R. L. Novy, M.D.
858 Fisher Bldg., Detroit
Bartus, Mary.....Luther Leader, M.D.
1129 David Whitney Bldg., Detroit
Bassett, Margaret.....Joseph F. Beer, M.D.
104 N. Riverside, St. Clair
Belasco, Velma.....E. T. Capuzzi, M.D.,
R. M. Atchison, M.D. & R. G. Wetterstroem, M.D
790 W. Main St., Northville
Cadieux, Luella.....Harry E. Schmidt, M.D.
667 Fisher Bldg., Detroit
Capshaw, Mrs. Alice.....Roy Tupper, M.D.
15105 W. 7 Mile Road, Detroit
Ceaser, Mrs. Ruth.....C. W. Lepard, M.D.
1025 David Whitney Bldg., Detroit
Clinton, Mrs. Patricia.....M. B. Levy, M.D.
13906 Woodward, Detroit
Coffman, Mrs. Sara.....E. A. Osius, M.D.
901 David Whitney Bldg., Detroit
Coleman, Geraldine.....N. Tanner, M.D.
8033 12th St., Detroit
Cousineau, Mrs. Thelma.....Charles Gitlin, M.D.
1620 Fullerton, Detroit
Cross, Mrs. Rae
E. H. Sieber, M.D. & J. W. Pichette, M.D.
15112 Michigan Ave., Dearborn
Currier, Mildred.....F. B. Wright, M.D.
1052 David Whitney Bldg., Detroit
Davidovich, Nada.....S. W. Trythall, M.D.
13300 Livernois, Detroit
Davis, Mrs. Leonora.....J. S. Hudson, M.D.
17443 E. Jefferson, Grosse Pointe
Drake, Mrs. Margaret.....E. A. Hoffman Clinic
7121 W. Vernor, Detroit
Eifert, Mrs. Margaret.....H. L. Keim, M.D.
1110 David Broderick Tower, Detroit
Folgman, Millicent.....Lincoln Clinic
3701 Livernois Ave., Detroit
French, Adeline.....R. W. Parr, M.D.
8-265 General Motors Bldg., Detroit
Gotts, Mrs. Audrey.....L. M. Hotchkiss, M.D.
16757 Meade Rd., Northville
Graham, Mrs. Ruth.....H. G. West, M.D.
12739 Puritan, Detroit
Gustaf, Mrs. Barbara K.....M. S. Brent, M.D.
13503 Northlawn, Detroit
Hasler, Mrs. L. Dorothy.....T. H. Miller, M.D.
1301 David Whitney Bldg., Detroit
Heidelberger, Freda..Harper Hospital (Director's Office)
3825 Brush St., Detroit
Henry, Margaret.....C. L. Schneider, M.D.
22148 Michigan Ave., Dearborn
Johnson, Joyce
N. L. Feldman, M.D. & M. S. Brent, M.D.
11420 Mack Ave., Detroit
Kotsch, Elizabeth M.....W. L. Anderson, M.D.
5902 Jos. Campau, Detroit
Kuhn, Mrs. Gaige.....R. M. Atchison, M.D.
501 W. Dunlap, Northville
Larry, Joan.....F. B. MacMillan, M.D.
920 David Whitney Bldg., Detroit
Lojowski, Lydia.....R. J. Elvidge, M.D.
4263 Bangor, Detroit
McLellan, Mrs. Margaret
C. G. Weltman, M.D. & L. W. Hull, M.D.
1701 David Whitney Bldg., Detroit
Mahon, Mae M.....Grace Hospital (Admitting Office)
4160 John R., Detroit
Malkey, Grace.....R. R. Shafter, M.D.
655 Fisher Bldg., Detroit
Marsh, Mabel.....Nathan Levitt, M.D.
607 Kales Bldg., Detroit
Miller, Katherine.....B. Seabrooks. M.D.
9136 Oakland, Detroit
Morris, Doris.....M. S. Brent, M.D.
13503 Northlawn, Detroit
Navin, Mary.....E. A. Hoffman Clinic
7121 W. Vernor, Detroit
Netzel, Louise W.....E. J. Tamblyn, M.D.
15315 E. Jefferson Ave., Grosse Pointe
Peck, Mrs. Elizabeth.....T. H. Miller, M.D.
1301 David Whitney Bldg., Detroit
Redman, Marlouise
W. R. Moore, M.D. & R. K. Whiteley, M.D.
541 David Whitney Bldg., Detroit
Runde, Mrs. Emly A.....J. T. Harper, M.D.
1252 David Whitney Bldg., Detroit
Schneider, Loretta.....J. M. Robb, M.D.,
1553 Woodward, Detroit
Smith, Sadie L.....E. A. Osius, M.D.
901 David Whitney Bldg., Detroit
Sper, Louise.....Wm. M. Tuttle, M.D.
3032 Vandyke, Detroit
Steckel, Mrs. Cora
N. L. Feldman, M.D. & M. S. Brent, M.D.
11420 Mack, Detroit
Surgeoner, Beth.....B. C. Lockwood, M.D.
723 David Whitney, Bldg., Detroit
Sweet, Mrs. Lily M.....A. E. Catherwood. M.D.
1337 David Whitney Bldg., Detroit
Taylor, Mrs. Ferne.....J. B. Rieger, M.D.
475 Peterboro, Detroit
Voss, Loretta B.....National Bank Bldg., Rochester
Warber, Esther.....4810 Fernwood, Detroit
Weatherwax, M. Marie.....F. B. Fralick, M.D.,
H. F. Falls, M.D. & J. W. Henderson, M.D.
University Hospital, Ann Arbor
Webster, Mrs. Sarah C.
Hugh Sullivan, M.D. & H. C. Moritz, M.D.
1053 David Whitney Bldg., Detroit
Whitcomb, Gwen.....Wm. S. Reveno, M.D.
968 Fisher Bldg., Detroit
Zack, Maxine.....T. I. Bergman, M.D.
16455 Woodward, Highland Park
Zelle, Mrs. Elizabeth
S. W. Trythall, M.D. & R. C. Jeremias, M.D.
13300 Livernois, Detroit
Zieleniewski, Helen.....(Unemployed at Present)
14110 Mendota, Detroit

GENESEE COUNTY

Number of Members, 49

Atherton, Phyllis.....C. Koop, M.D.,
S. L. Osher, M.D. & H. M. Golden, M.D.
1427½ Detroit St., Flint
Attaway, Betty.....A. E. Judd, M.D.
2401 Arlington Ave., Flint
Bartlett, Shirley Ann
Beaudoin, Shirley.....G. J. Curry, M.D.
627 E. Second St., Flint
Benton, Eleanor.....L. E. Simoni, M.D.
3210 S. Dort Highway, Flint
Birk, Mrs. Bernice.....Hurley Hospital, Flint
Borey, Mary.....C. Koop, M.D.
2503 Detroit St., Flint
Bohl, Doris.....F. H. Steinman, M.D.
734 Mott Foundation Bldg., Flint
Carpenter, Geneva.....G. L. Willoughby, M.D.
214 E. Marengo Ave., Flint
Case, Dixie.....A. J. Miltich, M.D.
414 Dryden Bldg., Flint
Coates, Ethel.....L. D. Kaufman, M.D.
1902 Stevenson St., Flint
Cornell, Patricia.....D. R. Wright, M.D.
3701 Mason St., Flint
De Haan, Grace.....John Rowe, M.D.
721 Smith St., Flint
Devereaux, Ruby.....M. G. Turner, M.D.
1226 Pettibone Ave., Flint
Dickinson, Donna.....Samuel S. Sorkin, M.D.
718 Beach St., Flint
Elliott, Selma.....W. H. Morrison, M.D.
205 Perry Rd., Grand Blanc
Faria, Ann.....W. D. Knapp, M.D.
2644 Clio Rd., Flint
Fegley, Ada.....W. W. Stevenson, M.D.
416 Kresge Bldg., Flint
Ford, Lucille May.....J. S. Schultz, M.D.
3327 Fleming Rd., Flint
Greenman, May E.....J. E. Portney, M.D.
2415 Detroit St., Flint
Hagerty, Katherine.....G. E. Anthony, M.D.
1016 Detroit St., Flint
Hardenbrook, Eleanor.....G. V. Conover, M.D.
420 Genesee Bank Bldg., Flint
Hatfield, Martha.....R. D. Ettinger, M.D.
Professional Bldg., Flint
Hesch, Vera.....P. K. Stevens, M.D.
202 Michigan Theatre Bldg., Flint
Hunt, Ardith.....R. M. Ragan, M.D.
3705 Beecher Rd., Flint
Ireland, May.....C. G. Walcott, M.D.
201 E. Caroline St., Fenton
Jenkins, Agnes.....Nan Denholm, M.D.
811 Mott Bldg., Flint
Kile, Julia.....R. B. Michelson, M.D.
5001 N. Saginaw St., Flint
La Clair, Pauline.....J. A. Mackstood, M.D.
2501 N. Saginaw St., Flint
Lande, Grace.....L. D. Kaufman, M.D.
4002 N. Saginaw St., Flint
Marran, Eileen.....J. E. Wentworth, M.D.
1651 N. Chevrolet Ave., Flint
Masse, Mrs. Dorothy.....Frank Johnson, M.D.
312 Paterson Bldg., Flint
Maul, Frances.....L. E. Simoni, M.D.
3210 S. Dort Highway, Flint
Moore, Ruth.....M. L. Sorkin, M.D.,
R. H. Willard, M.D. & M. Zeis, M.D.
718 Beach St., Flint
Neault, Virginia.....F. H. Steinman, M.D.
734 Mott Bldg., Flint
Noble, Agnelie N.....B. S. Faran, M.D.
5003 N. Saginaw St., Flint
Pappas, Mildred.....McLaren Hospital, Flint
Pascoe, Irene.....C. Hurd, M.D.
300 Roberts St., Flint
Pattinson, Mary
Paxton, Doorthy.....M. M. Farhat, M.D.
505 W. Court, Flint
Peru, Glenda.....K. B. Sandy, M.D.
2701 Detroit St., Flint
Porter, Evelyn.....C. G. Walcott, M.D.
401 Poplar St., Fenton
Schlottman, Agnes.....A. J. Miltich, M.D.
414 Dryden Bldg., Flint
Schroyer, Ilah
L. L. Willoughby, M.D. & G. F. Rieth, M.D.
1402 Davison Rd., Flint
Simmons, Lillian.....G. E. Drewyer, M.D.
218 E. Court St., Flint
Swarthout, Juanita.....L. O. Shantz, M.D.
1239 Mott Bldg., Flint
Taylor, Mildred.....L. D. Kaufman, M.D.
4002 N. Saginaw, Flint
Thomson, Norma Jean
Weigandt, Virginia.....F. V. Hauser, M.D.
1014 Mott Bldg., Flint

INGHAM COUNTY

Number of Members, 30

Ankney, Elizabeth.....Robert A. Burhans, M.D.
810 Michigan National Tower, Lansing
Bedwin, Florence
L. E. Wolcott, M.D. & M. E. Heerdt, M.D.
Grand River, Okemos
Bennett, Sally.....Irving E. Silverman, M.D.
1009 E. Michigan, Lansing
Berghouse, Lucille.....Samuel H. Rutledge, M.D.
110 W. Hillsdale, Lansing
Bruner, Jane.....W. O. Badgley, M.D.
624 N. Capitol, Lansing
Byers, Norma.....Robert S. Breakey, M.D.
1211 Bank of Lansing Bldg., Lansing
Crossley, Mary Lou.....Robert S. Breakey, M.D.
1211 Bank of Lansing Bldg., Lansing
England, Helen
H. L. Le Vett, M.D. & J. L. Sleight, M.D.
117½ W. Shiawassee, Lansing
Grams, Carol.....Don M. Le Duc, M.D.
310 N. Townsend, Lansing
Hanson, Katherine.....S. P. Fortino, M.D.
203 Bauch Bldg., Lansing
Jarrad, Doris.....F. Mansel Dunn, M.D.
301 Seymour, Lansing
Kessler, Laura.....K. W. Toothaker, M.D.
930 N. Washington, Lansing
Kratzer, Patricia.....John M. Wellman, M.D.
301 Seymour, Lansing
Little, Dorothy.....Paul R. Stimson, M.D.
515 S. Grand, Lansing
McAttee, Helen.....Samuel H. Rutledge, M.D.
110 W. Hillsdale, Lansing
McKeel, Janet.....Fredrick C. Swartz, M.D.
215 N. Walnut, Lansing
Morcere, Mrs. Dona Jean.....Wm. D. Hayford, M.D.
609 N. Washington, Lansing
Penner, Clella.....H. W. Harris, M.D.
609 N. Washington, Lansing
Peterson, Eleanor.....John M. Wellman, M.D.
301 Seymour, Lansing
Priest, Pauline.....John F. Sander, M.D.
401 W. Grand River, East Lansing
Reynolds, Margaret.....Don M. Le Duc, M.D.
310 N. Townsend, Lansing

Rogers, Helene..St. Lawrence Hospital, Admitting Office
1210 W. Saginaw, Lansing
Rybarsky, Geraldine.....A. John Garlinghouse, M.D.
408 N. Capitol, Lansing
Seyka, Kay.....K. W. Toothaker, M.D.
930 N. Washington, Lansing
Strahan, Carol.....T. A. Lucas, M.D.
426 W. Ottawa, Lansing
Thornton, Violet.....Leland R. McElmurry, M.D.
209 N. Walnut, Lansing
Trethewey, Elvi.....C. J. Stringer, M.D.
2601 S. Washington, Lansing
Warren, Ruth.....Harper G. Sichler, M.D.
301 Seymour, Lansing
Woolhouse, Margaret.....Milton Shaw, M.D.
320 Townsend, Lansing
Wygant, Catherine.....David B. Shaw, M.D.
320 Townsend, Lansing

JACKSON COUNTY

Number of Members, 46

Allen, Mrs. Mildred.....Geo. Baker, M.D., Parma
Appel, Mrs. Dorothy.....Saul Appel, M.D.
510 Dwight Bldg., Jackson
Blair, Marjorie.....Don Kudner, M.D.
435 Wildwood, Jackson
Brown, Karen.....J. W. Wholihan, M.D.
102 Lydia, Jackson
Brown, Susan.....J. M. McLaughlin, M.D.
710 S. Brown, Jackson
Brunk, Mrs. Myrtle.....J. A. Scott, M.D.
432 W. Michigan Ave., Jackson
Cass, Mrs. Evelyn.....J. A. Scott, M.D.
432 W. Michigan Ave., Jackson
Collins, Mrs. Marion.....R. E. Medlar, M.D.
719 17th St., Jackson
Cooper, Margaret Jean.....Jackson
Craft, Mrs. Martha.....J. J. Van Gasse, M.D.
City Health Dept., Jackson
Crownover, Mrs. Betty
R. C. Deming, M.D. & C. A. Stolberg, M.D.
517 Wildwood Ave., Jackson
Doherty, Elizabeth.....E. Corley, M.D.
1401 Reynolds Bldg., Jackson
Ferman, Mrs. Juanita.....Grant Otis, M.D.
525 Wildwood, Jackson
Freck, Mrs. Alice.....L. L. Stewart, Jr., M.D.
901 Reynolds Bldg., Jackson
Gieski, Mrs. Maryellen.....Stan Oleksy, M.D.
744 W. Michigan, Jackson
Goodwin, Mrs. Mildred.....Daniel Landron, M.D.
Michigan Center, Michigan
Hansen, Mrs. Frances.....W. A. Wickham, M.D.
420 W. Michigan, Jackson
Hill, Mrs. Hildred.....T. Hackett, M.D.
519 N. East, Jackson
Jeffrey, Mrs. Beth.....Sam Sugar, M.D.
509 Reynolds Bldg., Jackson
Kaiser, Mrs. Bernice.....J. B. Karr, M.D.
502 W. Michigan, Jackson
Kirwin, Patricia.....Llovd Olson, M.D.
435 Wildwood, Jackson
Kleinert, Mrs. Margaret.....N. D. Munro, M.D.
740 W. Michigan, Jackson
Krolikowski, Mrs. Louise.....E. L. Stone, M.D.
719 17th St., Jackson
Latham, Mrs. Patty.....Jack Bentley, M.D.
404 McNeil, Jackson
Licking, Mrs. Shirley.....Geo. C. Hardie, M.D.
290 W. Michigan, Jackson
May, Mrs. Sue.....J. B. Karr, M.D.
502 W. Michigan, Jackson
McArthur, Mrs. Betty.....E. E. Vivirski, M.D.
702 S. Elm, Jackson
McGregor, Mrs. Bernadine.....Don Kudner, M.D.
435 Wildwood, Jackson
Morgan, Mrs. Beverly.....Richard Ries, M.D.
612 First, Jackson
Nanry, Mrs. Carolyn.....Ed. Lake, M.D.
612 First St., Jackson
Nash, Miss Laura.....Jack Bently, M.D.
404 McNeil, Jackson
Paul, Anna M.....Harry Greenbaum, M.D.
1203 Greenwood, Jackson
Rountree, Mary Jo
R. C. Deming, M.D. & C. A. Stolberg, M.D.
517 Wildwood, Jackson
Rowan, Mrs. Marie.....Dean Smith, M.D.
500 W. Michigan, Jackson
Russell, Mrs. Gertrude.....G. H. Growt, M.D.
Addison, Michigan
Rutan, Cecile.....J. Van Schoick, M.D.
Hanover, Michigan
Russo, Mrs. Ruth.....W. A. Joerin, M.D.
612 First St., Jackson
Seagert, Mrs. Vedah.....A. M. Sirhal, M.D.
Brooklyn, Michigan
Slesiak, Mrs. Louise.....J. Rice, M.D.
503 McNeil, Jackson
Smith, Mrs. Dorothy.....Grant Otis, M.D.
525 Wildwood, Jackson
Smith, Marilyn.....Horace Porter, M.D.
505 Wildwood, Jackson
Stiffler, Wandalee.....Richard Ries, M.D.
612 First St., Jackson
Todd, Mrs. Margaret.....Sam Sugar, M.D.
509 Reynolds Bldg., Jackson
Vandermale, Mrs. Helen.....G. C. Hicks, M.D.
615 Dwight Bldg., Jackson
Walborn, Mrs. Zeulah.....M. Hunt, M.D.
2534 Francis, Jackson
Whitmore, Marion
R. C. Deming, M.D. & C. A. Stolberg, M.D.
517 Wildwood, Jackson

KALAMAZOO COUNTY

Number of Members, 88

Adams, Mrs. Rita*.....Ralph Shook, M.D.
611 American National Bldg., Kalamazoo
Angel, Mrs. Lila.....R. K. Currier, M.D.
6646 Portage Rd., Kalamazoo
Ash, Mrs. Charlotte.....H. H. Stryker, M.D.,
R. G. Howard, M.D. & R. E. DeLong, M.D.
Gull Rd., Kalamazoo
Baeurle, Ardis.....James Loynd, M.D.
1324 S. Park, Kalamazoo
Axtell, Paulene.....Radiology Clinic
458 W. South, Kalamazoo
Boes, Ilene....E. G. Betz, M.D., & H. E. De Pree, M.D.
Bronson Medical Center, Kalamazoo
Brady, Patricia.....Borgess Hospital
Gull Road, Kalamazoo
Brainard, Norine
P. F. Cooper, M.D. & H. C. Jackson, M.D.
Bronson Medical Center, Kalamazoo
Brown, Alice
W. G. Birch, M.D. & W. G. Hoebeke, M.D.
Bronson Medical Center, Kalamazoo
Buiskool, Evelyn.....Roger Scholten, M.D.
Bronson Medical Center, Kalamazoo

*Deceased.

Burd, Verdie.....N. De Witt, M.D.
803 Hanselman Bldg., Kalamazoo
Chalker, Janet.....R. Grekin, M.D.
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420 John St., Kalamazoo
Daines, Bernice.....M. M. Conrad, M.D.,
R. M. Cashen, M.D. & C. M. Hanson, M.D.
Bronson Medical Center, Kalamazoo
De Hoog, Dora.....Kalamazoo State Hospital
Oakland Drive, Kalamazoo
De Ryke, Kay
Don Marshall, M.D. & M. A. Finton, M.D.
Bronson Medical Center, Kalamazoo
De Young, Marge
E. G. Betz, M.D. & H. E. De Pree, M.D.
Bronson Medical Center, Kalamazoo
Dyer, Dorothy
R. J. Hubbell, M.D. & R. N. Kilgore, M.D.
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Ellwood, Maxine
W. K. Locklin, M.D. & R. B. Fast, M.D.
1410 American National Bldg., Kalamazoo
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Bronson Medical Center, Kalamazoo
Fessenden, Hazel
S. E. Andrews, M.D. & F. C. Cretsinger, M.D.
224 E. Cedar St., Kalamazoo
Foreman, Donna
R. J. Hubbell, M.D. & R. N. Kilgore, M.D.
Bronson Medical Center, Kalamazoo
Foster, Marian.....Maynard Southworth, M.D.
Schoolcraft
Fox, Frances
W. G. Birch, M.D. & W. G. Hoebeke, M.D.
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Fox, Patricia.....Robert Burrell, M.D.
907 American National Bldg., Kalamazoo
Francis, Inez
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224 E. Cedar, Kalamazoo
Govier, Clara.....Borgess Hospital
Gull Road, Kalamazoo
Grabber, Grace.....L. Goodhue, M.D.
2503 W. Main, Kalamazoo
Haessig, Gertrude.....Maynard Southworth, M.D.
Schoolcraft
Halbert, Betty.....C. A. Alexander, M.D.
118 W. North, Kalamazoo
Hanlon, Patricia A.
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1410 American National Bldg., Kalamazoo
Hayworth, Lucille.....Norman De Witt, M.D.
803 Hanselman Bldg., Kalamazoo
Hoard, Marilyn.....R. Warnke, M.D.
Bronson Medical Center, Kalamazoo
Houtcamp, Dorothy.....Ralph Shook, M.D.
611 American National Bldg., Kalamazoo
Johnson, Marvel.....Donald May, M.D.
420 John St., Kalamazoo
Johnson, Vava.....C. W. Perry, M.D.
1307 American National Bldg., Kalamazoo
Kenyon, Marge.....Prentice Lab.
458 W. South St., Kalamazoo
Knapp, Mary.....J. G. Malone, M.D.
420 John, Kalamazoo
Koch, Wilma.....Kalamazoo State Hospital
Oakland Drive, Kalamazoo
Laity, Helen....E. G. Betz, M.D. & H. E. De Pree, M.D.
Bronson Medical Center, Kalamazoo
Lamphear, Virginia.....Richard Lemmer, M.D.
Bronson Medical Center, Kalamazoo
Lierman, Joan.....M. M. Conrad, M.D.,
C. M. Hansen, M.D. & R. M. Cashen, M.D.
Bronson Medical Center, Kalamazoo
Lenting, Mary.....E. M. Williamson, M.D.,
P. D. King, M.D. & M. L. Barry, M.D.
Bronson Medical Center, Kalamazoo
Louis, Virginia.....Robert Warnke, M.D.
Bronson Medical Center, Kalamazoo
Marquardt, Phyllis
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224 E. Cedar, Kalamazoo
Markusse, Lena.....Kalamazoo State Hospital
Oakland Drive, Kalamazoo
McCann, Susanne
S. E. Andrews, M.D. & F. C. Cretsinger, M.D.
224 E. Cedar, Kalamazoo
McGowan, Neysa Ann.....M. M. Conrad, M.D.,
R. M. Cashen, M.D. & C. M. Hansen, M.D.
Bronson Medical Center, Kalamazoo
McElhenie, Jo
Don Marshall, M.D & M. A. Finton, M.D.
Bronson Medical Center, Kalamazoo
McMahan, Dorothy.....C. A. Alexander, M.D.
118 W. North, Kalamazoo
Monk, Betty Jo
H. S. Heersma, M.D. & R. R. Dew, M.D.
Bronson Medical Center, Kalamazoo
McPherson, Anna Registry
102 Pratt Bldg., Kalamazoo
Newland, Gladys.....Bernard Dowd, M.D.
420 John St., Kalamazoo
Niewoonder, Grace.....Kalamazoo State Hospital
Oakland Drive, Kalamazoo
Oggel, Mrs. Ruby.....D. C. Rockwell, M.D.
1418 American National Bldg., Kalamazoo
Oman, Priscilla.....Prentice Laboratory
458 W. South St., Kalamazoo
O'Reilly, Rita.....Robert Nicholson, M.D.
Bronson Medical Center, Kalamazoo
Peters, Teresa
W. K. Locklin, M.D. & R. B. Fast, M.D.
1410 American National Bldg., Kalamazoo
Phillips, Phyllis....—. Peelen, M.D. & C. R. Moe, M.D.
1324 S. Park, Kalamazoo
Rasmussen, Jennie.....K. F. Bennett, M.D.
Bronson Medical Center, Kalamazoo
Rezin, Karen.....M. H. Zolen, M.D.
628 S. Park, Kalamazoo
Roach, Eileen.....H. A. Machin, M.D.
420 John St., Kalamazoo
Rolph, Harriet.....E. M. Williamson, M.D.,
P. D. King, M.D. & M. L. Barry, M.D.
Bronson Medical Center, Kalamazoo
Root, Hazel
J. W. & M. Peelen, M.D. & K. M. Vander Velde, M.D.
Bronson Medical Center, Kalamazoo
Schumann, Helen.....Wm. Irwin, M.D.
804 Hanselman Bldg., Kalamazoo
Schrier, Trena.....1220 N. Burdick, Kalamazoo
Scott, Mary Virginia.....Preston Weadon, M.D.
Bronson Medical Center, Kalamazoo
Shepard, Mabel.....A. F. Fath, M.D.
907 American National Bldg., Kalamazoo
Smith, Mildred(Unemployed)
Smith, Pauline.....E. F. Hersey, M.D.
316 Whites Rd., Kalamazoo
Snow, Laura....H. S. Heersma, M.D. & R. R. Dew, M.D.
Bronson Medical Center, Kalamazoo
Stafinski, Helen.....D. A. Haddock, M.D.
6646 Portage Rd., Kalamazoo
Steinman, Ilo.....S. G. Delbert, M.D.
530 W. Lovell St., Kalamazoo
Stelma, Amber
Don Marshall, M.D. & M. A. Finton, M.D.
Bronson Medical Center, Kalamazoo

Vander Berg, Dorothy.....Wm. L. Green, M.D.
810 American National Bldg., Kalamazoo
Vanderklok, Phyllis.....B. W. Simpson, M.D.
610 S. Burdick, Kalamazoo
Vermeulen, Lois
W. G. Birch, M.D. & W. G. Hoebeke, M.D.
Bronson Medical Center, Kalamazoo
Vos, Kay.....Radiology Department,
458 W. South St., Kalamazoo
Wall, Patricia.....R. K. Currier, M.D.
6646 Portage Rd., Kalamazoo
Warner, Dorothy
R. L. Dana, M.D. & M. D. Verhage, M.D.
228 W. Cedar, Kalamazoo
Warner, Patricia.....P. F. Cooper, M.D.,
H. C. Jackson, M.D. & C. G. Callendar, M.D.
Bronson Medical Center, Kalamazoo
Winship, Charlotte.....B. J. Dowd, M.D.
420 John St., Kalamazoo
Wolchina, Amelia Registry
102 Pratt Bldg., Kalamazoo
Wolfe, Elizabeth....Kalamazoo State Hosp., Kalamazoo
Wykkel, Emily.....Bronson Medical Center, Kalamazoo

KENT COUNTY

Number of Members, 60

Allen, Bette Louise
A. B. Thompson, M.D. & W. W. Jack, M.D.
1810 Wealthy, S.E., Grand Rapids
Bareck, Irene.....Wm. Flinthof, M.D.
754 W. Fulton, Grand Rapids
Beckett, Mrs. Laurie.....Lucile Grant, M.D.
1810 Wealthy, S.E., Grand Rapids
Bell, Mrs. Laura Jean
A. B. Thompson, M.D. & W. W. Jack, M.D.
1810 Wealthy, S.E., Grand Rapids
Benzin, Frances.....Eugene Sevensma, M.D.
1318 McKay Tower Bldg., Grand Rapids
Berquist, Mrs. Evelyn.....G. Winter, M.D.
1967 Godfrey S.W., Grand Rapids
Billinger, Dorothy.....K. Vining, Jr., M.D.
833 Lake Dr., S.E., Grand Rapids
Boluyt, Marie.....A. Lamberts, M.D.
68 Ranson N.E., Grand Rapids
Bomers, Gladys
K. E. Fellows, M.D. & D. P. Moore, M.D.
529 Metz Bldg., Grand Rapids
Borek, Cecelia
K. E. Fellows, M.D. & D. P. Moore, M.D.
529 Metz Bldg., Grand Rapids
Bos, Marilyn.....Wm. Fuller, M.D.
833 Lake Dr., S.E., Grand Rapids
Brechting, Matilda
C. P. Truog, M.D. & B. R. Van Zwalenberg, M.D.
201 Metz Bldg., Grand Rapids
Burgess, Mrs. Loraine
G. T. Aitken, M.D. & J. A. MacDonell, M.D.
520 Kendall Bldg., Grand Rapids
Collins, Margaret.....Grand Rapids
Davis, Mrs. Ann.....Sunshine Hospital
700 Fuller, N.E., Grand Rapids
De Groat, Thelma.....Sunshine Hospital
700 Fuller, N.E., Grand Rapids
Deretein, Jean
H. P. Kooistra, M.D. & J. F. Wurz, M.D.
412 Medical Arts Bldg., Grand Rapids
Durrant, Mrs. Kay.....J. Depree, M.D.,
A. B. Thompson, M.D. & G. R. Schneider, M.D.
1810 Wealthy, S.E., Grand Rapids
Fannaff, Mrs. Margaret.....W. Dixon, M.D.
529 Medical Arts Bldg., Grand Rapids
Fry, Mrs. Avonell.....John T. Boet, M.D.
2339 Wyoming, S.W., Grand Rapids
Gehring, Catherine
J. F. Sanders, M.D. & M. Bonzelaar, M.D.
216 Medical Arts Bldg., Grand Rapids
Hackett, Arlene.....Allison Vandenberg, M.D.
518 Medical Arts Bldg., Grand Rapids
Haney, Mrs. Armella
A. B. Thompson, M.D. & W. W. Jack, M.D.
1810 Wealthy, S.E., Grand Rapids
Hoogenboom, Mrs. Catherine.....J. C. Foshee, M.D.
124 Fulton S.E., Grand Rapids
Hoogesteger, Joan Mae.....C. Winter, M.D.
1967 Godfrey S.W., Grand Rapids
Horning, Mrs. Marion.....J. Whinnery, M.D.
242 Kendall Bldg., Grand Rapids
Hunt, Mrs. Leota May.....H. C. Robinson, M.D.
521 Medical Arts Bldg., Grand Rapids
Jankowski, Esther
F. M. Jameson, M.D. & D. S. McIntyre, M.D.
833 Lake Drive S.E., Grand Rapids
Johnson, Esther.....C. E. Farber, M.D.,
F. S. Gillett, M.D. & E. Fitzgerald, M.D.
68 Ranson, N.E., Grand Rapids
Juzapaitis, Mrs. Rose.....Grand Rapids Health Dept.,
803 Ionia, N.W., Grand Rapids
Ksiakiewicz, Betty
E. C. Thompson, M.D. & A. Hoffs, M.D.
935 Lincoln N.W., Grand Rapids
Lafferty, Elma.....J. D. Flynn, M.D.
211 Medical Arts Bldg., Grand Rapids
Levandoski, Frances
H. P. Kooistra, M.D. & J. F. Wurz, M.D.
412 Medical Arts Bldg., Grand Rapids
Lowes, Blanche.....Donald Chandler, M.D.
719 Ashton Bldg., Grand Rapids
Malinowski, Joan L.
J. F. Sanders, M.D. & M. Bonzelaar, M.D.
216 Medical Arts Bldg., Grand Rapids
McNee, Mrs. Melissa.....C. W. Beel. M.D.
212 Kendall Bldg., Grand Rapids
Miller, Mrs. Carolyn.....H. Lieffers, M.D.
400 Medical Arts Bldg., Grand Rapids
Mulliken, Mrs. Toni.....J. D. Miller, M.D.
604 Metz Bldg., Grand Rapids
Nienhuis, Gertrude.....Grand Rapids Health Dept.
303 Ionia, N.W., Grand Rapids
Oppenhuizen, Mrs. Shirley.....G. De Boer, M.D.
2270 Nelson, S.E., Grand Rapids
Rawlings, Mary Lou
E. C. Thompson, M.D. & A. J. Hoffs, M.D.
2028 Palace, S.E., Grand Rapids
Rodeback, Vivian
G. T. Aitken, M.D. & — McDonald, M.D.
520 Kendall Bldg., Grand Rapids
Roper, Barbara J.....Sunshine Hospital
700 Fuller, N.E., Grand Rapids
Rupke, Mrs. Barbara.....D. Balyeat, M.D.
1810 Wealthy, S.E., Grand Rapids
Scheiren, Marion.....W. Steffenson, M.D.
1810 Wealthy, S.E., Grand Rapids
Schroeder, Mrs. Marilyn.....G. Lewis, M.D.
3425 Division S., Grand Rapids
Service, Mrs. Martha
R. A. Rasmussen, M.D. & R. H. Meade, M.D.
1810 Wealthy, S.E., Grand Rapids
Sheets, Mrs. Eileen.....J. Lentini, M.D.
320 Metz Bldg., Grand Rapids
Siebers, Mae
J. W. Rigterink, M.D. & J. R. Brink, M.D.
308 Metz Bldg., Grand Rapids
Skipper, Florence
E. C. Thompson, M.D. & A. J. Hoffs, M.D.
1329 Scribner, N.W., Grand Rapids
Smith, Mrs. Alta.....G. Lewis, M.D.
3425 Division S., Grand Rapids

Stuart, Mrs. Marianne
C. E. Booher, M.D., & J. C. Montgomery, M.D.
1810 Wealthy, S.E., Grand Rapids

Swartz, Mrs. Ruth
R. C. Boelkins, M.D. & — McDougal, M.D.
125 Fountain, N.E., Grand Rapids

Tardy, Mrs. Georgia.....Sunshine Hospital
700 Fuller, N.E., Grand Rapids

Watson, Barbara
R. C. Boelkins, M.D. & — McDougal, M.D.
125 Fountain, N.E., Grand Rapids

Wielenga, Annie L.....G. E. Braunschneider, M.D.
1632 Leonard, N.W., Grand Rapids

Wirth, Mrs. Marie.....Ferguson Droste, M.D.
72 Sheldon, S.E., Grand Rapids

Wood, Nola.....L. R. Ralph, M.D.
833 Lake Drive, S.E., Grand Rapids

Wojtaszek, Mrs. Dorothy.....W. Rodgers, M.D.
616 Bridge, N.W., Grand Rapids

Zeef, Mrs. Barbara.....H. Damstra, M.D.
1553 Boston, S.E., Grand Rapids

MUSKEGON COUNTY

Number of Members, 39

Anthony, Josephine.....C. B. Mandeville, M.D.
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Bartlett, Mrs. Jean G.
L. M. Lapham, M.D. & A. O. Engstrom, M.D.
123 W. Colby, Whitehall

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2045 Lief, Muskegon

Callicott, Mrs. Marguerite.....L. E. Holly, M.D.,
A. H. Joistad, M.D. & R. W. Emerick, M.D.
878 Second St., Muskegon

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1891 Lake Shore Drive, Muskegon

Collier, Catherine.....Wm. H. Tyler, M.D.
1435 Peck St., Muskegon

Cumming, Lois.....Wm. H. Tyler, M.D.
1435 Peck St., Muskegon

Daigle, Mary
J. K. Hill, M.D. & L. C. Paterson, M.D.
Panyard Bldg., Muskegon

Drewes, Mrs. Linda G.....Louis Le Fevre, M.D.
450 W. Western, Muskegon

De Marr, Lois.....Park S. Bradshaw, M.D.
1014 Jefferson, Muskegon

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100 E. Larch, Muskegon

Flickema, Beverly.....Ralph V. August, M.D.
72 E. Broadway, Muskegon Heights

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L. M. Lapham, M.D. & A. O. Engstrom, M.D.
123 W. Colby, Whitehall

Goodwin, Maurine Ann.....Arthur L. Benedict, M.D.
22 W. Southern, Muskegon

Harrington, Mrs. Lucille.....Arthur L. Benedict, M.D.
22 W. Southern, Muskegon

Hegedus, Marilyn.....Wm. M. Le Fevre, M.D.
Hackley Bank Bldg., Muskegon

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2500 Peck St., Muskegon Heights

Hill, Mrs. Mary Alice.....Arthur L. Benedict, M.D.
22 W. Southern, Muskegon

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A. H. Joistad, M.D. & R. W. Emerick, M.D.
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1014 Jefferson, Muskegon

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Stefula, Ellen(Unemployed)

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Toepfner, Marilyn.....Norman A. Fleishman, M.D.
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OAKLAND COUNTY

Number of Members, 60

Best, Mrs. C. Irene.....Harold R. Roehm, M.D.
319 Wabeek Bldg., Birmingham

Bjork, Mrs. Beth L.
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Cary, Mrs. Jeanette.....Ralph M. Fox, M.D.
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Crilley, Mrs. Bertha.....H. C. Crissman, M.D.
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Cross, Mrs. Ruth C.....E. C. Rupp, M.D.
P. E. Schmitt, M.D. & W. J. Zimmerman, M.D.
253 Washington Square Bldg., Royal Oak

Davis, Mrs. Mary E.
A. J. Seaborn, M.D. & S. Berger, M.D.
1413 S. Washington Ave., Royal Oak

Denniston, Mrs. Margaret.....Henry O. Coucke, M.D.
1148 S. Woodward, Royal Oak

Ditchy, Elaine
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217 Briggs Bldg., Birmingham

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Fine, Mrs. Viola M.....G. L. Dunlap, M.D.
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628 N. Woodward Ave., Birmingham
Grant, Mrs. Mary Louise.....Robert J. Mason, M.D.
618 N. Woodward Ave., Birmingham
Hagy, Christine E.....E. M. Stein, M.D.
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Handerson, Mary.....Robert J. Mason, M.D.
618 N. Woodward Ave., Birmingham
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Jensen, Mrs. Genevieve
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Joslyn, Joan D.....E. G. Pear, M.D.
3027 N. Woodward Ave., Royal Oak
Kempf, Mr. Eugene J.....A. A. Ignatius, M.D.
1915 E. Nine Mileroad, Ferndale
Kienle, Gertrude.....J. O. Esslinger, M.D.
227 Briggs, Bldg., Birmingham
Kubiac, Beatrice.....H. C. Crissman, M.D.
22750 Woodward Ave., Ferndale
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217 Briggs Bldg., Birmingham
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253 Washington Square Bldg., Royal Oak
Lewis, Mrs. Joan
C. T. Ekeland, M.D. & A. R. Young, M.D.
904 Riker Bldg., Pontiac
Luscombe, Mrs. Charlotte.....W. L. Kempt, M.D.
525 Southfield, Birmingham
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109 E. Nine Mile Road, Ferndale
Oakes, Mrs. Elizabeth.....James E. Read, M.D.
610 N. Woodward, Birmingham
O'Dell, Mrs. Dorotha.....B. F. Gariepy, M.D.
120 W. Eleven Mile Rd., Royal Oak
Pearsall, Mrs. Mildred.....Robert A. Byberg, M.D.
420 Washington Square Bldg., Roval Oak
Polzin, Mrs. Arlene.....J. I. Nosanchuk, M.D.
1216 Pontiac State Bank Bldg., Pontiac
Ray, Mrs. Virginia.....James F. Pearce, M.D.
617 Washington Square Bldg., Royal Oak
Read, Mrs. Emmeline M.....Vincent P. Russell, M.D.
324 Washington Square Bldg., Royal Oak
Rehm, J. Helen.....S. M. Lewis, M.D.
400 W. Nine Mile Road, Ferndale
Robertson, Mrs. Grady O.....929 W. Cross, Ypsilanti
Rood, Mrs. Mary
John S. Lambie, M.D. & C. A. Neafie, M.D.
15 W. Huron St., Pontiac
Schwarze, Evelyn
Shaw, Frances(Unemployed)
Slegt, Gertrude.....R. B. Hasner, M.D.
617 Washington Square Bldg., Royal Oak
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Snow, Sylvia(Unemployed)
Stapleton, Beatrice.....J. B. Hassberger, M.D.
620 N. Woodward Ave., Birmingham
Still, Margo L.....L. N. Merrill, M.D.
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Teasdale, Mrs. Francis.....R. E. Boucher, M.D.
617 Washington Square Bldg., Royal Oak
Troutman, Mrs. Marianne.....E. J. Westfall, M.D.
230 Washington Square Bldg., Royal Oak
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T. Y. Watson, M.D. & A. K. Stolpman, M.D.
640 N. Woodward Ave., Birmingham
Wooster, Mrs. Avis G.....Ralph G. Ferris, M.D.
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Yerkey, Mrs. Ann.....Etta C. Link, M.D.
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OTTAWA COUNTY

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Rt. 2, Box 395, Zeeland
Bequette, Huldah.....Holland City Hospital
577 Michigan Ave., Holland
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280 S. Maple, Zeeland
Bolthouse, Julia.....F. W. De Young, M.D.
313 Maple, Ferrysburg
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& W. G. Winter, M.D.
646 Michigan Ave., Holland
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1338 Woodlawn, Grand Haven
Brazda, Mrs. Norma.....Grand Haven Municipal Hos.
1110 Hillcrest, Grand Haven
Brewer, Mrs. Audrey I.....Holland City Hospital
392 W. 19th St., Holland
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800 W. 24th St., Holland
Conklin, Gloria.....Holland City Hospital
185 W. 25th St., Holland
De Haan, Dorothy.....Alvin Bonzelaar, M.D.
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324 W. 12th St., Holland
Homkes, Marilee.....Holland City Hospital
500 W. 32nd St., Holland
Jones, Mrs. Helen R.....Grand Haven Muncipal Hosp.
221 Lafayette, Grand Haven
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Van Hesteren, Dena.....J. B. Kearney, M.D. 271 W. 15th St., Holland

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SAGINAW COUNTY

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Brubaker, Mrs. Nan.....Saginaw General Hospital 1447 N. Harrison, Saginaw

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Burkart, Mrs. Rita.....C. W. Cory, M.D. 1227 N. Michigan, Saginaw

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Cummins, Miss Hallie..Caro State Hospital for Epileptics Caro, Michigan

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Rohn, Lois.....Saginaw General Hospital 1447 N. Harrison, Saginaw
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Seibel, Mrs. Doris.....Albert W. Farley, Jr., M.D. 1803 N. Michigan, Saginaw
Shotwell, Mary Lou.....Donald V. Sargent, M.D. 1703 N. Michigan, Saginaw
Smith, Patricia Kay.....Saginaw General Hospital 1447 N. Harrison, Saginaw
Smith, Mrs. Yvonne.....E. G. Hester, M.D. 2031 N. Michigan, Saginaw
Stone, Mrs. Marion.....Saginaw General Hospital 1447 N. Harrison, Saginaw
Swibold, Mrs. Margaret.....Oliver W. Lohr, M.D. Central Laboratory, 537 Millard, Saginaw
Swift, Mrs. Marian.....Eugene A. Hand, M.D. 211 Bearinger Bldg., Saginaw
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Toth, Dorothy.....Saginaw General Hospital 1447 N. Harrison, Saginaw
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Ward, Mrs. Betty.....Charles R. Murray, M.D. 1827 N. Michigan, Saginaw
Wegner, Lorraine.....E. C. Galsterer, M.D. 124 S. Jefferson, Saginaw
Wichman, Mrs. Better.....Saginaw General Hospital 1447 N. Harrison, Saginaw
Willert, Mrs. Dorothy E.....T. P. Mahaney, M.D. 2031 N. Michigan, Saginaw
Williams, Mrs. Donna.....Frances M. Sullivan, M.D. 1213 N. Michigan, Saginaw
Witherspoon, Jean.....Arno W. Weiss, M.D. 308 Eddy Bldg., Saginaw
Wotton, Mrs. Lucille..Caro State Hospital for Epileptics Caro
Wachowski, Mrs. Virginia.....Associate Member 2312 Hosmer, Saginaw

VAN BUREN COUNTY

Number of Members, 10

Cornish, Mrs. Lucille.....W. R. Young, M.D. Lawton
Dannison, Mrs. Cecile.....Bert Diephus, M.D. South Haven
Gottmann, Mrs. Ruth.....Evan L. Copeland, M.D. Decatur
Huey, Mrs. Grace.....Charles Ten Houten, M.D. Paw Paw
Jensen, Mrs. Eleanor.....M. W. Buckborough, M.D. South Haven
Jewett, Mrs. Maxine.....T. J. Dillon, M.D. Paw Paw
King, Mrs. Barbara.....T. J. Dillon, M.D. Paw Paw
McCone, Mrs. Norma.....Buckborough, M.D. & Diephus, M.D. South Haven
Novy, Mrs. Ethel.....Itzen & Kleber, M.D. South Haven
Ramsey, Mrs. Anne.....A. E. Parks, M.D. Lawton

Michigan State Medical Society

Constitution

ARTICLE I—NAME

Section 1. The name of this organization shall be The Michigan State Medical Society.

ARTICLE II—COMPONENT COUNTY SOCIETIES

Section 1.—Component County Societies.

Component County Societies shall consist of those County Medical Societies which hold charters from this State Medical Society.

Sec. 2.—Geographical Scope.

Only one component County Society shall be chartered in any one county of the State; provided, however, when in the judgment of the House of Delegates it is deemed to be to the best interests of this Society, a charter may be granted to a component County Society comprising two or more counties.

ARTICLE III—PURPOSES

Section 1. To bring into one organization the Doctors of Medicine of this State of Michigan, and through it and other similar societies of other states to form and maintain the American Medical Association.

Sec. 2. To maintain a program of educational service to the public on matters of health and hygiene.

Sec. 3. To encourage among members of the medical profession the interchange of views on all phases of professional advancement and thus better to equip each member of the profession to serve society and promote the public health.

Sec. 4. To maintain a program of scientific education for the members of The Society keyed to the constantly developing discoveries in the field of medicine; and to foster, encourage and co-ordinate postgraduate facilities for the medical profession as a whole.

Sec. 5. To disseminate advances in medical research among the profession generally, by the issuance of scientific publications.

Sec. 6. To maintain and to advance the standards of medical practice in this State with respect to the highest concepts of ethics.

Sec. 7. To acquire and hold such real and personal property as may be necessary for the full and proper execution of the corporate purposes as detailed herein.

Sec. 8. To carry on such organization, functions and activities as are deemed necessary to accomplish effectively the above purposes; provided, however, that the Society shall engage in no activities that cannot be construed as relevant, incidental or necessary to its charitable, educational and scientific purposes.

ARTICLE IV—DIVISIONS

Section 1. This Society as a State unit of the American Medical Association, and as the State expression of the County Societies of Michigan, shall have three major divisions.

1. The Society as a whole, as when it meets in Annual Session.

2. The Scientific Assembly with its subordinate or related bodies.

3. The House of Delegates with its subordinate or related bodies.

ARTICLE V—THE SOCIETY AS A WHOLE

Section 1. The Society as a whole shall hold an Annual Session at such time and place and of such duration as the House of Delegates may determine. This power may be delegated to The Council or to the Executive Committee of The Council by the House of Delegates.

ARTICLE VI—SCIENTIFIC ASSEMBLY

Section 1. The Scientific Assembly of this Society is the convocation of its members for the presentation and discussion of subjects pertaining to the science and art of medicine, its allied specialties and the problems of public health conservation.

ARTICLE VII—HOUSE OF DELEGATES

Section 1. The House of Delegates shall be the legistive body of the Michigan State Medical Society and shall consist of Delegates elected by component County Societies and Delegates-at-Large, as prescribed by the By-Laws.

ARTICLE VIII—MEMBERS

Section 1. This Society shall consist of active members, honorary members, associate members, retired members, life members and military members, elected in accordance with the By-Laws.

ARTICLE IX—OFFICERS AND ELECTED REPRESENTATIVES

Section 1. The officers of this Society shall be a President; a President-Elect; a Treasurer; a Secretary; a Speaker and a Vice Speaker of The House of Delegates; and Councilors.

Sec. 2. The elected representatives of this Society shall be the Delegates and the Alternate Delegates to the House of Delegates of the American Medical Association.

ARTICLE X—THE COUNCIL

Section 1. The Council shall be the Executive Body of the Society. It shall consist of one Councilor from each Councilor District, the President, President-Elect, immediate Past President, Speaker of the House of Delegates, with the Secretary and the Treasurer, the last two being elected by the foregoing. It shall have the custody and entire control of all funds and property of the Society and shall act for the Society as a Whole and for The House of Delegates between sessions.

Sec. 2. The Executive Committee of The Council shall consist of its Chairman, Vice Chairman, Chairman of the Finance Committee, Chairman of the County Societies Committee, Chairman of the Publication Committee, President, President-Elect, Secretary, Treasurer and the Speaker of the House of Delegates. It shall act for the Society as a whole and for the House of Delegates between sessions of The Council, except that a policy established by the House of Delegates or by The Council shall not be changed.

Sec. 3. The Vice Speaker shall be a member of The Council and the Executive Committee without vote except in the absence of the Speaker.

ARTICLE XI—FUNDS AND EXPENSES

Section 1. Funds for meeting the expenses of the Society shall be raised by annual dues, special assessments and voluntary contributions.

Sec. 2. Annual membership dues and assessments shall be fixed by the House of Delegates.

ARTICLE XII—AMENDMENTS

Section 1. The House of Delegates may amend any article of this Constitution by a two-thirds vote of the Delegates seated at any Annual Session, provided that

such amendment shall have been presented in open meeting at the previous Annual Session, and that it shall have been published at least once during the year in The Journal of the Society, or sent officially to each component County Society at least two months before the meeting at which final action is to be taken.

Sec. 2. This Constitution or any amendment thereto shall become effective immediately upon its adoption.

By- Laws

CHAPTER 1—COMPONENT COUNTY SOCIETIES

Section 1. The charter of each component County Society shall require that each of the provisions of the Constitution and By-Laws of the Michigan State Medical Society, together with each amendment to either thereof, hereafter adopted, in so far as the same is applicable, shall be an integral part of the Constitution and By-Laws of the component County Society to which a charter is issued and shall in no way be inconsistent with the Constitution and By-Laws of the Michigan State Medical Society. Each charter shall be authorized by the House of Delegates and signed by the President and the Secretary of this Michigan State Medical Society.

Sec. 2. The House of Delegates is empowered to revoke the charter of any Component County Society whenever it finds that such Society has materially breached any of the provisions of the Constitution or By-Laws of this State Society or has failed to function within the expressed spirit and purpose of this State Society to such an extent that revocation of charter is compatible with the best interests of this State Society. Petition for the revocation of charter of any component County Society may be filed with The Council by a Councilor of the district within which each Society is located, or by any three members of The Council of this State Society or by the President of this State Society. Such petition shall be in writing and set forth with reasonable particularity the matters complained of and upon which the petition is founded. A copy of such petition together with written notice of the time and place of hearing on the petition shall be served on the affected component County Society by registered mail, return receipt requested, not less than 60 days before the date of such hearing. The affected component County Society may, within 30 days after service upon it of copy of the petition, file with The Council by registered mail, return receipt requested, a written answer thereto. The Council shall afford the affected component County Society a fair hearing of the matters complained of and a suitable opportunity to present its defense. The component County Society may be represented by legal counsel. Written arguments may be filed on behalf of the affected component County Society and by the petitioner. Stenographic notes shall be made of the entire proceedings on such hearing and a complete record shall be prepared, which record shall consist of the petition, answer, testimony, exhibits, written arguments and other pertinent matter. The Council shall make its decision based on the records, setting forth in writing its finding of facts, conclusions and reasons therefor. If two-thirds of the members of The Council do not concur in the conclusion that the charter of the affected component County Society should be revoked, the petition shall be deemed dismissed and the proceedings ended. If two-thirds of the members of The Council concur in the conclusion that the charter of the affected component County Society should be revoked, the Chairman of The Council shall transmit to the House of Delegates a report, consisting of the decision of The Council with all records annexed, and shall serve a copy thereof on the affected component County Society. The House of Delegates shall at the next regular or special session thereof following the transmittal of such report, consider and take such action on the report as it may deem proper. In case the House of Delegates desires further proofs in relation to the issues involved, it may remand the matter to The Council for further hearing and report. The action of the House of Delegates on the report of The Council shall be the final decision with reference to the revocation of the charter of a component County Society. Provided, that the component County Society, if it feels aggrieved by the decision of the House of Delegates, may, within six months, appeal to the Judicial Council of the American Medical Association, whose opinion shall be final.

CHAPTER 2—REGULATION OF MEMBERSHIP

Section 1. Each component County Society shall be the judge of the qualifications of its own members; but, as such societies are the only portals to this State Society and the American Medical Association, each reputable practitioner of medicine who meets the requirements specified in the By-Laws, Chapter V, shall be eligible to active membership.

Sec. 2. A Doctor of Medicine whose principal location of practice is near a county line may hold his membership in that component County Society most convenient for him to attend, on permission of The Council of the Michigan State Medical Society.

Sec. 3. Each component County Society shall have general direction of the affairs of the profession in the county, and its influence shall be exerted constantly for bettering the scientific, the moral and material conditions of every Doctor of Medicine in the county; systematic effort shall be made by each member and by the component County Society as a whole to increase the membership until it embraces every eligible Doctor of Medicine in the county.

Sec. 4. The Secretary of each component County Society shall keep a roster of its members and if practicable a list of non-affiliated Doctors of Medicine in the county, and other Doctors of Medicine, such as commissioned officers of the Navy, Army, and Public Health Service, in which shall be shown the full name, the address, the college and date of graduation, the date of license to practice in this State, and such other information as may be deemed necessary.

Sec. 5. Each member of a component County Society, who is in good standing, shall be privileged to attend each meeting and take part in all the proceedings and shall be eligible to any office within the gift of the Society except as otherwise provided.

Sec. 6. In addition to the qualifications specified in their respective Constitution and By-Laws, County Societies shall exact as qualifications for membership and its continued tenure, the acceptance and adherence to the Principles of Medical Ethics of the American Medical Association in accordance with the interpretation thereof by the Judicial Council of the American Medical Association, and such other qualifications as may be provided by this Constitution and By-Laws.

Sec. 7. No member who is under sentence of suspension or expulsion from any component County Society of

this State Society, or whose name has been dropped from its roll of members, shall be entitled to any of the rights or benefits of this State Society.

CHAPTER 3—ARREARS IN DUES

Section 1. Any member in arrears for dues in the amount for one year may regain membership by paying up all back dues. Any member in arrears for more than one year may regain membership by paying all back dues or by being elected again to membership, at the option of the Component County Society.

Sec. 2. For the purpose of determining the dues for new members only, the fiscal year of the Michigan State Medical Society shall be divided into four three-month periods. New members shall pay adjusted annual dues and assessments for the unexpired quarterly periods of that year. Such new members shall not be entitled to membership benefits until their election to membership has been duly reported to the Secretary of the State Society and such benefits shall not cover any period prior to their becoming members in good standing.

CHAPTER 4—TRANSFER OF MEMBERSHIP

Section 1. Transfer of membership from one component County Society to another, occasioned by a change in location, shall be effectuated in the following manner: The member who wishes such transfer shall make application to the County Society which he wishes to join, and tendering payment of dues for the remainder of the current year, calculated to the nearest quarter.

Sec. 2. The Secretary of the component County Society to which application is made shall request certification of standing from the component County Society in which membership is held. Upon receiving such request, The Secretary of the latter society shall supply certification of good standing, provided the following requirements have been met:

(a) All component County Society dues and assessments shall have been paid for the calendar year previous to the year in which application for transfer is made.

(b) Full State Society dues and assessments shall have been paid for the year in which application for transfer is made.

(c) Component County Society dues and assessments shall have been paid to cover that portion of the year in which application for transfer is made, the time being calculated to the nearest quarter.

(d) The member shall not be under suspension or facing charges of unethical conduct.

Section 3. (a) In case the component County Society dues have been paid in full for the year, and certification of good standing is being issued, the Secretary of that component County Society shall refund component County Society dues represented by the unexpired portion of the year, calculated to the nearest quarter.

(b) Upon receipt of certification of good standing, and favorable action by the component County Society to which application has been made, the transfer of membership shall be in effect.

Sec. 4. Resignation for transfer of membership to another State Society shall be effectuated in the following manner:

Any member in good standing, not facing charges of unethical conduct, whose State and component County Society dues and assessments are not in arrears, and who has moved his principal location to another State, may tender his resignation, which shall be effective at the beginning of the next quarter. Such resignation shall be transmitted to the Secretary of the Michigan State Medical Society, who shall give the departing member certification of good standing.

Provided the portion of the calendar year following such resignation is not less than one-quarter, the Secretaries of the State and component County Societies shall refund any dues and assessments already paid for the remainder of the year, calculated to the nearest quarter.

CHAPTER 5—MEMBERSHIP AND CLASSIFICATION OF MEMBERSHIP

Section 1. Active Member—Active Members shall comprise all the active members of component County Societies. To be eligible for active membership in any component County Society, a Doctor of Medicine must hold an unrevoked license to practice medicine, surgery and midwifery by authority of the Michigan State Board of Registration in Medicine, and comply with all other provisions of this Constitution and By-Laws.

Sec. 2. Honorary Member—Component County Societies may elect as an Honorary Member any person distinguished for his services or attainments in medicine or the allied sciences, or who has rendered other services of unusual value to organized medicine or the medical profession. Upon recommendation of a component County Society, the House of Delegates may elect such a person as Honorary Member of the State Society. An Honorary Member shall pay no dues to the State Society and shall be without right to vote or hold office in either component County or State Society.

Sec. 3. Associate Member—Component County Societies may elect as an Associate Member:

(a) Any person not a member of the profession but engaged in scientific or professional pursuits whose principles and ethics are consonant with those of this State Society.

(b) An intern serving the first year in any approved hospital, an intern of longer standing, a resident physician in training, and a teaching fellow not engaged in private practice, but not after six years from the receipt of first medical degree (M.D. or M.B.): provided his training has not been interrupted by exigencies of War Service or by totally incapacitating illness. Such intern, resident or teaching fellow may become an Associate Member of the Michigan State Medical Society without action of the House of Delegates provided he has been certified to the Michigan State Medical Society through formal application to the Michigan State Medical Society Secretary by his component County Medical Society.

(c) A Doctor of Medicine, resident of the State of Michigan, for the period of time he is in active Military Service of the United States previous to his engaging in active practice.

(d) A Doctor of Medicine not engaging in any phase of medical practice.

(e) A commissioned medical officer of the United States Army, Navy, Public Health Service or physician employed by the Veterans Administration on duty in this State, who is not engaged in private practice of medicine, not to exceed two years.

(f) An Active Member, by transfer, for the period of time he is temporarily out of active practice on account of protracted illness, provided his dues are paid for the year previous to the onset of illness.

(g) An Active Member, by transfer, for the period of one year while he is temporarily out of practice on account of postgraduate medical studies, provided his membership dues are paid to the end of the preceding calendar year. This may be renewed upon petition to The Council at its discretion.

Upon recommendation of a component County Society, the House of Delegates may elect such a person as an Associate Member of this State Society. An Associate Member shall not pay dues to this State Society and shall not have the right to vote, nor hold office in either component County or State Society. Component County Societies may require any Associate Member to pay certain local dues, out of which THE JOURNAL of the Michigan State Medical Society subscription is to be paid to the State Society for which each such Associate Member shall receive THE JOURNAL of the Michigan State Medical Society.

Sec. 4. Retired Member—A member who has maintained membership in a component County Society of this State Society for a period of ten or more years, and having retired from practice, may be transferred to the retired member's roster, provided his membership dues are paid to the end of the preceding calendar year. He shall be entitled to receive THE JOURNAL of the Michigan State Medical Society at such rates as The Council may determine. He shall have the right to vote and hold office.

Sec. 5. Non-Resident Member—Component County Societies may elect as a Non-Resident Member any Doctor of Medicine residing and practicing outside of The County who is a member in good standing of his own component County Society. A Non-Resident Member shall not have the right to vote or hold office.

Sec. 6. Life Member—A Doctor of Medicine who has attained the age of seventy years or has been in practice fifty years and has maintained an active membership in good standing for twenty-five years in any constituent state society with dues paid for the previous calendar year may, upon his application, and recommendation of his component County Society, be transferred to the Life Members' Roster. He shall have the right to vote and hold office but shall pay no dues to the State Society. Requests for such transfer shall be accompanied by certification of the Secretary of the State Society as to years of membership in good standing. He shall be entitled to receive THE JOURNAL of the Michigan State Medical Society at such rates as The Council may determine.

Sec. 7. Military Members. Any active member in good standing who serves on active duty in the military forces of the United States during a war or similar national emergency may be transferred to the Military Membership roster for the period of time he is in Service. A Military Member shall not be required to pay state dues and assessments during the period of his Service and for the balance of the year in which he is separated from Military Service provided that this remission of postservice dues and assessments shall not be less than six months. or during the years he may be totally disabled immediately following such duty.

Sec. 8. For Retired, or Life Membership, the Component County Society of such members shall make request for certification. in writing, to the Secretary of the State Society thirty days in advance of an Annual Session of The House of Delegates. Requests for transfer shall be accompanied by certification of the Secretary of the State Society, as to years of practice and years of membership in good standing. Transfers shall be by election in the House of Delegates.

Sec. 9. Any change in membership status shall be effected by resolution presented in triplicate before the annual session of the House of Delegates after previous certification by the secretaries of the county and state societies.

CHAPTER 6—DISCIPLINE OF MEMBERSHIP

Section 1. A component County Society may expel, suspend or otherwise discipline any of its members in accordance with the provisions of its constitution and by-laws; provided, however, that any member against whom such action is proposed shall be accorded the benefit of the following procedures:

Sec. 2. Efforts at conciliation and adjustment of differences shall precede formal complaint against a member sought to be disciplined.

Sec. 3. Petition for expulsion, suspension or other discipline of a member shall be in writing, signed by the majority of the Ethics Committee of his component County Society or by not less than 10 per cent of the members of the Society, and shall set forth with reasonable particularity the matters complained of.

Sec. 4. A copy of the petition, together with notice of the time and place of hearing shall be served on the affected member not less than 30 days prior to the date of hearing. This notice is to be sent by registered mail, return receipt requested.

Sec. 5. The affected member may file with his component County Society, or a suitable committee thereof, a written answer within fifteen days after service upon him of a copy of such petition. He shall be accorded a fair hearing of the matters complained of before the Ethics Committee of his component County Society and afforded an opportunity to present his defense, either in person or by counsel.

Sec. 6. In the event that a hearing shall have been had before an appropriate committee of a component County Society as provided in Section 5, Chapter 6 of these By-Laws, such committee promptly after the conclusion of said hearing shall make a report in writing to the component County Society, setting forth its finding of facts, conclusions and reasons therefor, as well as its recommendations for an appropriate order to be made by the component County Society in relation to the matter heard by such committee.

Sec. 7. A stenographic record shall be made of the proceedings at the hearing, and in case an appeal is taken by such member, a transcript thereof shall be prepared at the expense of the component County Society for transmittal, if required, to the State Society. In such case, a copy of the transcript shall be furnished to the appellant as soon as may be.

Sec. 8. Any order of a component County Society for expulsion, suspension or other discipline of a member shall be in writing, and shall set forth findings of fact, conclusions and reasons therefor. A copy of such order shall be served on the affected member as soon as may be.

Sec. 9. The Ethics Committee may reprimand or counsel a member; however, discipline must be meted out by the Society as a whole or its Council. A two-thirds vote of the members present of the component County Society or its Council, due notice having been given, is necessary for expulsion or suspension of a member.

Sec. 10. The affected member shall have an opportunity to avail himself of his rights of further appeal according to the following procedure: Appeal to The Council of this State Medical Society; appeal to the House of Delegates of this State Medical Society; and final appeal to the Judicial Council of the American Medical Association. A member deeming himself aggrieved by an order of expulsion, suspension or other discipline made by a component County Society Council may appeal to his component County Society.

Sec. 11. Notice of appeal to The Council of the Michigan State Medical Society shall be in writing and set forth the specific reasons for such appeal. The notice shall be filed with said Council and a copy thereof served on the member's component County Society. Unless such appeal is taken within 30 days after service by registered mail, return receipt requested, of the copy of the order of discipline on the affected member, such order shall be final and effective. As soon as practicable after receiving copy of notice of appeal, the component County Society shall forward to The Council of the Michigan State Medical Society a complete record of the case, which record shall consist of the petition, answer, testimony, order

appealed from, and all other pertinent writings and exhibits. The Council shall thereon transmit such record together with the notice of appeal to the Committee on Ethics of this State Society for review. The Committee on Ethics shall promptly review the record and may request the component County Society or the affected member to furnish each further proof in writing as the Committee deems necessary for the proper and full review of the matter. Written arguments may be filed by the component County Society and the affected member within such time as may be designated by the Committee on Ethics. The Committee on Ethics shall make its findings and recommendations in writing and report the same to The Council of the Michigan State Medical Society. The Council shall thereupon, after careful hearing, orally and/or in writing, and consideration of facts and exhibits, affirm, reverse or modify the order appealed from by written decision, a copy whereof shall be served on the component County Society and the affected member. Unless, within 60 days of the service upon him and his component County Society by registered mail of copy of such decision, the member or the component County Society takes a final appeal to the Judicial Council of the American Medical Association, the decision of The Council of the Michigan State Medical Society shall be final and effective.

Sec. 12. A member of a component County Society whose license to practice medicine in this State has been revoked shall be dropped from membership automatically as of the date of revocation.

CHAPTER 7—GENERAL MEETINGS

Section 1. During each Annual Session the Society shall hold one or more General Meetings. The number and time of these General Meetings shall be determined by The Council of the Michigan State Medical Society. Such General Meetings shall be presided over by the President or in his absence the President-Elect or the Chairman of The Council. One such meeting shall be called "Officers Night." At this meeting called "Officers Night," the report of the House of Delegates shall be rendered.

Sec. 2. The following shall be the items of business:

1. Call to Order.
2. Announcements and reports of the House of Delegates.
3. Retiring President's annual address.
4. Induction into office of incoming President.
5. Introduction of newly elected officers and elected representatives.
6. Special addresses.
7. Resolutions and motions.

Sec. 3. Each registered member at an Annual Session shall have an equal right to participate in the deliberations of a General Meeting and each Active Member, and Life Member so registered shall have the right to vote on pending questions before the General Meeting.

Sec. 4. At any General Session or at any Section Meeting of this State Society, there may be recommended to the House of Delegates or to The Council the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and the public. Such investigations and reports shall not become official action or expression of this State Society until approved by the House of Delegates or The Council.

CHAPTER 8—HOUSE OF DELEGATES

Section 1. Composition—The House of Delegates shall be composed of Members elected by the Component County Societies. Reports having been properly filed with the Secretary of this Society, each component County Society shall be entitled to send to the House of Delegates each year one delegate for each fifty voting members, active, life and retired, and one delegate for each additional major fraction thereof. Any component County Society having less than fifty members shall be entitled to send one delegate.

Sec. 2. Officers of this State Society and members of The Council shall be ex-officio members of The House of Delegates, and, with the exception of the Speaker and Vice Speaker of The House of Delegates, shall be without power to vote in The House of Delegates. The Past President shall be a member at large of The House of Delegates during the first year of Past-Presidency with right to vote and hold office. All other Past-Presidents shall have the privilege of the floor, without the right to vote.

Sec. 3. The House of Delegates shall transact all of the business of this State Society not otherwise specifically provided for; it shall adopt rules and regulations for its own government and for the administration of the affairs of The Society; it shall provide for the organization of Councilor Districts.

Section 4. The House of Delegates shall meet annually at the time and place of the meeting of this State Society as a whole, as when it meets in General Session, and may hold such number of meetings as the House may determine or its business require, recessing from day to day as may be necessary to complete its business and specifying its own time for the holding of its meetings. The House of Delegates may also be called into session at any time by the Speaker upon a two-thirds vote of The Council, or on petition of twenty-five per cent of the delegates. The purpose of such special sessions shall be stated in the notice to call.

Sec. 5. A Delegate must have been a qualified member of this State Society for at least two years preceding election.

Sec. 6. A Delegate once seated shall remain a Delegate throughout the entire session and for one year thereafter until the next Session of this House of Delegates, and his place shall not be taken by any other Delegate or Alternate, provided that in case of emergency the House of Delegates may seat a duly accredited Alternate from his component County Society. Any Delegate-Elect not present to be seated at the hour of call of the first meeting may be replaced by the accredited Alternate next on the list as certified by the Secretary of the component County Society involved.

Sec. 7. The Secretary of component County Societies shall certify to the Secretary of this State Society the names of Delegates and Alternates who shall represent them at any Annual or Special Session. Each component County Society shall elect Alternate Delegates in equal number to the number of Delegates and designate their seniority.

Sec. 8. A quorum of the House of Delegates shall be constituted by not less than 40 per cent of the accredited Delegates, providing that a majority of such quorum shall not come from any one component County Society.

Sec. 9. The officers of the House of Delegates shall be a Speaker and Vice Speaker. The Secretary of this State Society, elected by The Council, shall be the Secretary of the House of Delegates. The Speaker and Vice Speaker shall be elected by the House of Delegates at the Annual Session. The Speaker of the House of Delegates shall be a member of The Council and of its Executive Committee with right to vote.

Sec. 10 (a) The House of Delegates is the legislative body of this State Society, and shall have authority to adopt and institute such methods and measures as it

may deem most sufficient for the upbuilding and establishing of the interest of the profession in Michigan.

(b) It shall concern itself with and advise as to the interests of the profession and of the public in those matters of legislation pertaining to medical education, medical registration, medical laws and public health.

(c) It shall be active in the education of the public in regard to medical research and scientific medicine.

(d) Delegates and Alternate Delegates to the American Medical Association shall be elected in accordance with the regulations of that parent organization and as hereinafter provided. They shall hold office for two years.

At each annual election, candidates for Delegates to the House of Delegates of the American Medical Association shall be nominated in number equal to or greater than the number to be elected that year. Election shall be by ballot. The required number of high candidates shall be declared elected.
In case of a tie vote of high candidates, the winner, or winners, shall be decided by drawing lots; supervised by the Speaker of the House of Delegates; provided, however, that any candidate thus tied shall have the right to a decision by ballot if he requests same.

The number of Alternate Delegates shall equal the number of Delegates. They shall be elected in exactly the same manner after all Delegates have been elected.

Alternate Delegates shall have relative seniority according to the respective number of votes received by them, and such seniority shall be designated at the time of election. Alternate Delegates serving their second year shall hold seniority over those Alternate Delegates serving their first year in office.

Any vacancies caused by failure or inability of any Delegates to attend shall be assigned to Alternate Delegates in order of their seniority as defined in this section.

(e) It shall have the authority to appoint committees, standing or special, from among its members or other doctors not members of the House of Delegates. Such committees will report to the House of Delegates and their members may participate in the debate upon their committees' report, regardless of membership in the House of Delegates.

(f) It shall approve each action and resolution in the name of this State Society before the same shall become effective. Provided, that in the interim, in the presence of necessity for prompt action, The Council or the Executive Committee of The Council is empowered to act on behalf of this State Society.

(g) It shall elect the Councilors upon the nomination of the Delegates of the Councilor District whose Councilor's term expires, as hereinafter provided.

Component county societies of Councilor Districts shall be notified in writing by the Secretary of the State Society 60 days in advance of the annual session when a Councilor is to be elected from their District at the expiration of the usual term.

If a vacancy in The Council occurs during an annual session of the Michigan State Medical Society the delegates of the component county societies will be given time in which to conduct a caucus in order to consider nomination(s) for the vacancy.

(h) The House of Delegates shall provide for the division of the scientific work of the Society into appropriate sections adding new and discontinuing old sections. It shall prescribe the rules governing the meetings of these sections and the election of officers.

(i) It shall present a summary of its proceedings at a General Meeting of the Society and publish its minutes in The Journal of the Michigan State Medical Society.

(j) It may have the following reference committees, together with Tellers and Sergeant-at-Arms, appointed by the Speaker of the House and approved by the House of Delegates, and such other reference committees as may be necessary from time to time:

1. Credentials.
2. Reports of Council.
3. Reports of Officers.
4. Reports of Standing Committees.
5. Reports of Special Committees.
6. Constitution and By-Laws.
7. Resolutions.
8. Rules and Order of Business.
9. Legislation and Public Relations.
10. Hygiene and Public Health.
11. Executive Session.
12. Medical Service and Prepayment Insurance.
13. Emergency Medical Service.
14. Miscellaneous Business:

 Tellers

 Sergeant-at-Arms

(k) No new business shall be introduced in the last meeting of the House of Delegates without unanimous consent of the Delegates except when presented by The Council. All new business so presented shall require three-fourths affirmative vote for adoption.

(l) Election of officers shall be held at the last meeting of the House of Delegates at the Annual Session. Each nomination shall be made from the floor of the House. In the event of having only one nominee, the candidate may be elected by a viva voce vote. Members elected to office shall take office with the induction of the Incoming President, as provided in this Constitution and By-Laws.

(m) Each resolution introduced into the House of Delegates shall be in writing and presented in triplicate to the Secretary, immediately after the Delegate has read the same, and shall be referred to the proper reference committee by the Speaker before action thereon is taken.

(n) Robert's Rules of Order, when not in conflict with this Constitution and By-Laws, shall govern the parliamentary proceedings of the House of Delegates.

CHAPTER 9—THE COUNCIL

Section 1. The Council is the Executive Body of this State Society. It shall determine its own time and place of meeting. It shall hold an Annual Meeting at which time it shall elect to serve for one year its Chairman, Vice Chairman, a Secretary, Chairman of the Finance Committee, Chairman of the County Societies Committee, and Chairman of the Publication Committee; these with the President, the President-Elect, and the Speaker of the House of Delegates shall constitute the Executive Committee of The Council.

Sec. 2. Each Councilor shall be the organizer, peace maker and censor for his District. He shall visit each component County Society in his District at least once a year and keep in touch with the activities of the societies constituting his District. He shall make such reports as the Chairman of The Council shall request concerning the condition of the profession in that District.

Sec. 3. Upon written complaint of at least half of the Delegates of the Councilor District involved, presented to the House of Delegates, in regular or special session stating that the Councilor of said District has been remiss in his duties as prescribed above, and has been notified a month previously of this proposed action, the Speaker of the House shall bring the matter before the House of Delegates for consideration. On two-thirds vote of the House of Delegates this office shall be declared vacant and a successor elected.

Sec. 4. It shall make careful inquiry into the condition of the profession in each county in the State, and shall have authority to adopt such methods as may be

deemed most efficient for building up and increasing the interest in such component County Societies as already exist. It shall especially and systematically endeavor to promote friendly intercourse between Doctors of Medicine in the same locality. It shall make every effort to bring each reputable Doctor of Medicine in the State under the Society's influence.

Sec. 5. It shall, upon application, provide and issue charters to component County Societies organized in conformity with this Constitution and By-Laws. It shall revoke such charters when deemed necessary, as provided in this Constitution and By-Laws.

Sec. 6. The Council shall direct and control the publication of THE JOURNAL of the Michigan State Medical Society.

Sec. 7. The Council shall elect an Editor of THE JOURNAL of the Michigan State Medical Society, and a Treasurer at its annual meeting. They shall take office immediately and serve for a term of one year, or until their successors are elected and have taken office.

Sec. 8. The funds of the Society shall be disbursed only by order or action of The Council. This authority may be delegated to the Executive Committee of The Council by The Council.

Sec. 9. Funds of the Society for investment shall be delivered to the custody of the Treasurer by the Secretary.

Sec. 10. The Council shall provide such headquarters for The Society as may be required to conduct its business properly.

Sec. 11. The Council shall render an Annual Report to the House of Delegates.

Sec. 12. The following County Societies shall constitute the Councilor Districts of the State. Wayne County shall constitute four Councilor Districts without permanent set boundaries within that County.

First District—Wayne

Second District—Clinton, Eaton, Hillsdale, Ingham, Jackson

Third District—Branch, Calhoun, St. Joseph

Fourth District—Allegan, Berrien, Cass, Kalamazoo, Van Buren

Fifth District—Barry, Ionia-Montcalm, Kent, Ottawa

Sixth District—Genesee, Shiawassee

Seventh District—Huron, Sanilac, Lapeer, St. Clair

Eighth District—Gratiot-Isabella-Clare, Midland, Saginaw, Tuscola

Ninth District—Grand Traverse-Leelanau-Benzie, Manistee, Northern Michigan (Antrim, Charlevoix, Cheboygan and Emmet, combined), Wexford-Missaukee.

Tenth District—Alpena-Alcona-Presque Isle, Bay-Arenac-Iosco, North Central Counties (Otsego, Montmorency, Crawford, Oscoda, Roscommon, Ogemaw, Gladwin and Kalkaska, combined).

Eleventh District—Mason, Mecosta-Osceola-Lake, Muskegon, Newaygo, Oceana

Twelfth District—Chippewa-Mackinac, Delta-Schoolcraft, Luce, Marquette-Alger.

Thirteenth District—Dickinson-Iron, Gogebic, Houghton-Baraga-Keweenaw, Menominee, Ontonagon.

Fourteenth District—Lenawee, Livingston, Monroe, Washtenaw

Fifteenth District—Macomb, Oakland

Sixteenth District—Wayne

Seventeenth District—Wayne

Eighteenth District—Wayne

CHAPTER 10—STANDING COMMITTEES

Section 1. The following Standing Committees shall be appointed by the President with the advice of The Council:

(a) Committee on Postgraduate Medical Education

(b) Committee on Preventive Medicine and its Sub-Committees

(c) Committee on Public Relations and its Sub-Committees

(d) Committee on Ethics

(e) Committee on Legislation

Sec. 2. The Committee on Postgraduate Medical Education shall consist of a Chairman and twelve members, four of whom shall be appointed each year to serve for a three-year term.

The duty of this committee shall be to supervise for the Michigan State Medical Society all postgraduate medical training in the State and, with the approval of the Executive Committee of The Council, make any changes, additions or discontinuances of present programs and initiate such new programs as they deem advisable.

Sec. 3. Committee on Preventive Medicine shall consist of its Chairman, the State Health Commissioner, and Chairmen of the following committees:

Committee on Rheumatic Fever Control
Committee on Cancer Control

Committee on Maternal Health

Committee on Venereal Disease Control

Committee on Tuberculosis Control

Committee on Industrial Health

Committee on Mental Health

Committee on Child Welfare

Committee on Geriatrics.

Committee on Postgraduate Medical Education

Such other committees as may, from time to time, be appointed to study and develop programs dealing with specific diseases.

The duty of this committee shall be to collect, analyze and distribute information on preventive medicine, and to advise medical and other groups or individuals concerning problems in preventive medicine and public health.

Sec. 4. The Committee on Public Relations shall be appointed by the President. It shall be the duty of this committee: (a) to integrate and publicize all approved plans and projects emanating from The Council, the Executive Committee, and other Standing and Special Committees of the Michigan State Medical Society; (b) to consider all plans and projects, and make suggestions and recommendations for improving or changing such plans for integration and publicizing; (c) to develop further plans for better physician-public contacts. The President shall appoint such Sub-Committees of this committee as are required in the execution of its work.

Sec. 5. The Committee on Ethics shall consist of eight members appointed by the President with the advice of The Council, each member to serve for a four-year term, so staggered that two members are selected annually. In case a vacancy occurs before the expiration of a member's term, the President shall appoint a successor to serve the unexpired portion of the term.

The Committee shall render advisory opinions on questions of ethics submitted to it by The Council.

On request of The Council it shall conduct an investigation, under rules approved by The Council, concerning the ethical conduct of a designated member of this State Society and report its findings to The Council in accordance with these By-Laws.

Sec. 6. The Committee on Legislation shall consist of a Chairman, the President-Elect of this State Medical Society and the Chairman of The Council of this State

Medical Society and members to be appointed by the President.

The Committee on Legislation shall utilize every organized influence of the profession for the promoting of such legislation as will be for the best interests of the public's health and that of scientific medicine. It shall work under the direction of the House of Delegates or The Council when the House of Delegates is not in session. No bill or proposed law or amendment shall be delivered to any member of The Michigan State Legislature for introduction in the name of this State Society or by any of its committees until such proposed legislations shall have been endorsed and approved by The Council. (Provided this latter authority may be delegated to the Executive Committee of The Council by The Council.)

It shall submit an annual report with recommendations to The House of Delegates.

CHAPTER 11—OFFICERS

Section 1. Officers shall be installed at the General Meeting at which the reports of the House of Delegates are received. They shall serve until the next Annual Session, provided that Councilors shall serve for five years, and provided further that not more than four Councilor terms shall expire normally at any Annual Session; provided further that Delegates to the American Medical Association shall serve for two years; provided further that not more than three Delegates to the American Medical Association shall be elected in any one year.

Sec. 2. Officers shall serve until their successors are elected and inducted into office.

Sec. 3. At the Annual Session of this State Society, next following his election, The President-Elect shall be installed into and assume the office of the President. He shall serve until his successor takes office. The assumption of office shall occur in a General Session of the Society as a whole, at which the report of the House of Delegates is received. If no General Meeting is held at the Annual Session, the induction into office of the Incoming President and the newly elected officers and representative officials shall be in the last meeting of the Annual Session of the House of Delegates.

Sec. 4. The President shall preside at the General Meeting of the Society at which the reports of the House of Delegates are received, and shall fill vacancies in office and committees with the advice of The Council, unless otherwise provided for; he shall appoint the members of each committee not otherwise provided for; he shall deliver the President's address; he shall have a voice in the deliberations of the House of Delegates and he shall be an ex-officio member of The Council with the right to vote.

Sec. 5. The President-Elect shall be a member of The Council and the Executive Committee of The Council ex officio, and shall have the right to vote, and shall act for the President in his absence or disability. If the office of President shall become vacant, the President-Elect shall succeed to the presidency. If the office of President shall again become vacant, The Council, at a Special Session, shall elect a President for the unexpired term.

Sec. 6. The Treasurer shall be the custodian of all the invested funds and the securities of the Society. He shall be accountable through The Council to the Society. The Council shall cause an annual audit of his accounts to be made. He shall be bonded in amount considered sufficient by The Council, the bond to be paid from the funds of the Michigan State Medical Society.

Sec. 7. The Secretary shall be an active member of the Michigan State Medical Society and shall be paid a salary to be determined by The Council. He shall be the recording officer of the House of Delegates, The Council, Scientific Assembly and Annual Session. He shall be bonded in amount considered sufficient by The Council, the bond to be paid from the funds of the Michigan State Medical Society. He shall also discharge the following duties:

(a) Collect all annual membership dues, assessments, donations and such other monies as may be due to the Society; keep membership records and issue membership certificates.

(b) He shall make all required reports to the American Medical Association. He shall make a report of the proceedings of the House of Delegates to the Annual Meeting of this State Society.

(c) He shall deposit all funds received in an approved depository and disburse them upon order of The Council. The Council may delegate the authority for disbursing funds to the Executive Committee of The Council. The Council shall cause an annual audit of his accounts by a certified public accountant. He shall render a report to The Council reviewing the Society's activities and imparting recommendations for the advancement of the Society's interests at each meeting of The Council.

(d) Under the direction of The Council and with the advice of the Editor, he shall be the business manager of The Journal of the Michigan State Medical Society.

(e) He shall superintend all arrangements for the holding of each meeting in compliance with the Constitution and By-Laws and instructions of The Council or its Executive Committee.

(f) He shall send out all official notices of meetings, committee appointments, certificates of election to office and special duties of committees.

(g) He shall receive and transmit to the House of Delegates and to The Council each committee and officer's annual report.

(h) He shall institute and correlate each new activity under the supervision of The Council or its Executive Committee, and shall work on component County Society integration and furnish information to the public concerning health matters as directed by the President and The Council.

Sec. 8. There shall be an Executive Director, not necessarily a Doctor of Medicine or a member of the Michigan State Medical Society, who shall be appointed by The Council at its Annual Meeting and shall be remunerated by a salary which shall be fixed by The Council.

The Secretary shall, with the approval of The Council, assign duties to the Executive Director as he deems advisable.

Sec. 9. The Speaker of the House of Delegates shall preside at sessions of the House of Delegates. He shall, with the approval of the President, appoint all committees created by the House of Delegates, unless otherwise provided, and shall perform such duties as custom and parliamentary usage require. He shall be a member of The Council and of its Executive Committee with the power to vote.

Sec. 10. The Vice Speaker shall assume the Speaker's duties in the Speaker's absence in the House of Delegates and such other times as the House of Delegates or The Council shall determine.

CHAPTER 12—REFERENDUM

Section 1. At any General or Special Session of this State Society as a whole, as when it meets in General Session, it may by a two-thirds vote order a general referendum upon any question pertinent to the purposes and objects of the Michigan State Medical Society, organized medicine, or health of the public; provided, however, that a quorum at such General or Special Meet-

ing shall consist of 300 members of the Michigan State Medical Society who are in good standing.

Sec. 2. The House of Delegates, by a majority vote may submit any question pertinent to the community and organized medicine to the membership of the Society for its vote, such vote to be taken by County Societies and certified by their secretaries to the State Society Secretary. Two-thirds of the vote cast shall be required to carry the question.

CHAPTER 13—SEAL

Section 1. The Society shall have a common SEAL. The power to change or renew the seal shall rest with The Council.

CHAPTER 14—EMERGENCY

Section 1. When prompt speech and action are imperative, authority to speak and act in the name of this State Society is vested in The Council or the Executive Committee of The Council of this State Society.

CHAPTER 15—DUES

Section 1. The Secretary of each component County Society shall collect and forward the dues and assessments to the Secretary of the Michigan State Medical Society on or before April first of each year.

Sec. 2. Any member in arrears after April 1 of each official year shall stand suspended until his name is properly recorded and his dues and assessments for the current year properly remitted, unless his name is to be submitted for election to one of the special memberships listed in Chapter 5 at the next succeeding Annual Session of the House of Delegates.

Sec. 3. Any component County Society which fails to make the reports required at least thirty days before the Annual Session of this State Society shall be held suspended and none of its members or Delegates shall be permitted to participate in any of the proceedings of the Society or of the House of Delegates.

CHAPTER 16—ELECTION—COMPONENT COUNTY SOCIETIES

Section 1. At the Annual Meeting of each component County Society or at a designated meeting of which ample notice has been given, each component County Society shall elect Delegates and Alternate Delegates in conformity with the provisions of this Constitution and By-Laws to represent the component County Society in the House of Delegates of this State Society. The Secretary of the component County Society shall immediately send a list of its Delegates and Alternate Delegates to the Secretary of this State Society.

A Delegate, or in his absence, the Alternate Delegate, becomes a member of the House of Delegates when properly registered and seated at the Annual or Special Session following his election by the component County Society.

CHAPTER 17—DEFINITION OF SESSION AND MEETING

Section 1. A session shall mean all meetings at any one call.

Sec. 2. A meeting shall mean each separate convention at any one session.

CHAPTER 18—AMENDMENTS

Section 1. These By-Laws may be amended by a majority vote of the Delegates seated, after the proposed amendment is laid on the table for one meeting of the House of Delegates. These By-Laws become effective immediately upon adoption.

COUNCILOR DISTRICTS

First District—Wayne

Second District—Clinton, Eaton, Hillsdale, Ingham, Jackson

Third District—Branch, Calhoun, St. Joseph

Fourth District—Allegan, Berrien, Cass, Kalamazoo, Van Buren

Fifth District—Barry, Ionia-Montcalm, Kent, Ottawa

Sixth District—Genesee, Shiawassee

Seventh District—Huron, Sanilac, Lapeer, St. Clair

Eighth District—Gratiot-Isabella-Clare, Midland, Saginaw, Tuscola

Ninth District—Grand Traverse-Leelanau-Benzie, Manistee, Northern Michigan (Antrim, Charlevoix, Cheboygan and Emmet, combined), Wexford-Missaukee.

Tenth District—Alpena-Alcona-Presque Isle, Bay-Arenac-Iosco, North Central Counties (Otsego, Montmorency, Crawford, Oscoda, Roscommon, Ogemaw, Gladwin and Kalkaska, combined)

Eleventh District—Mason, Mecosta-Osceola-Lake, Muskegon, Newaygo, Oceana

Twelfth District—Chippewa-Mackinac, Delta-Schoolcraft, Luce, Marquette-Alger

Thirteenth District—Dickinson-Iron, Gogebic, Houghton-Baraga-Keweenaw, Menominee, Ontonagon

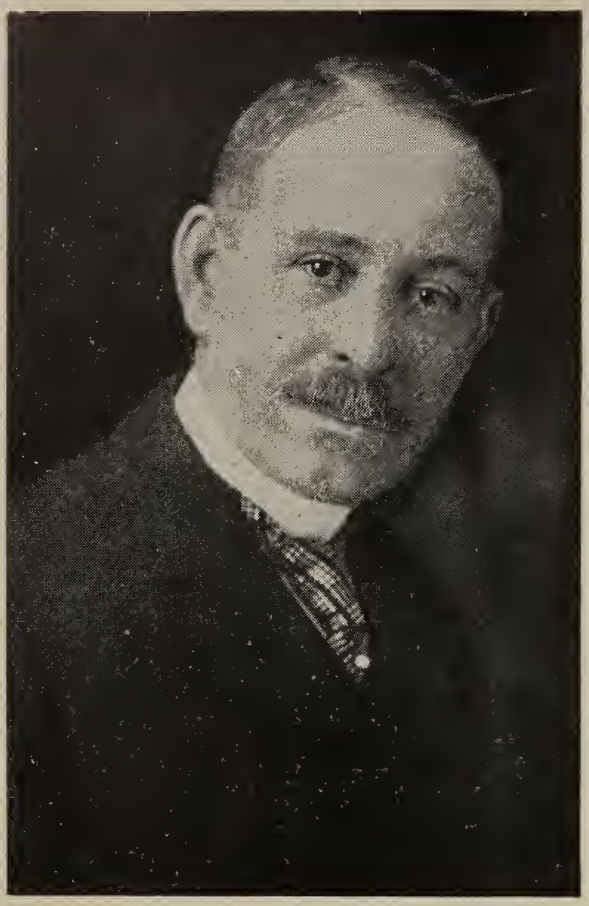
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Fifteenth District—Macomb, Oakland

Sixteenth District—Wayne

Seventeenth District—Wayne

Eighteenth District—Wayne



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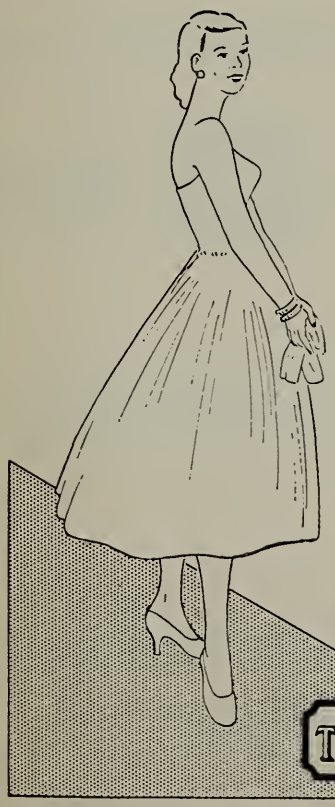
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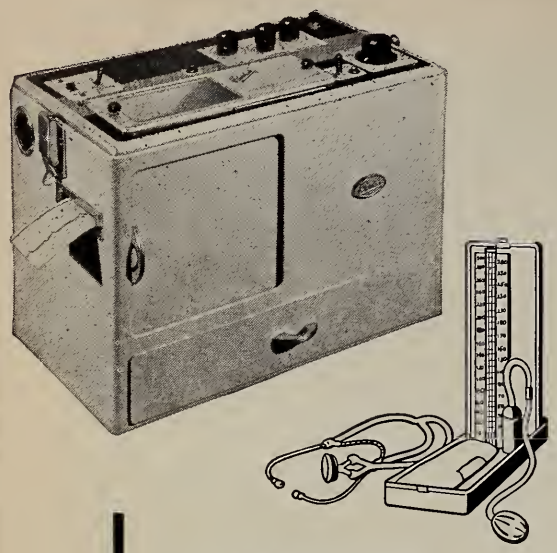
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1. Pollock, B. E., and Pruitt, F. W.: Am. J. M. Sc., 226:172, 1953.

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